

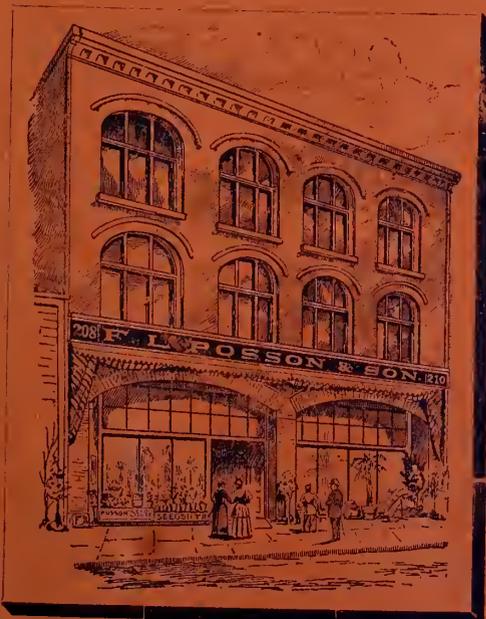
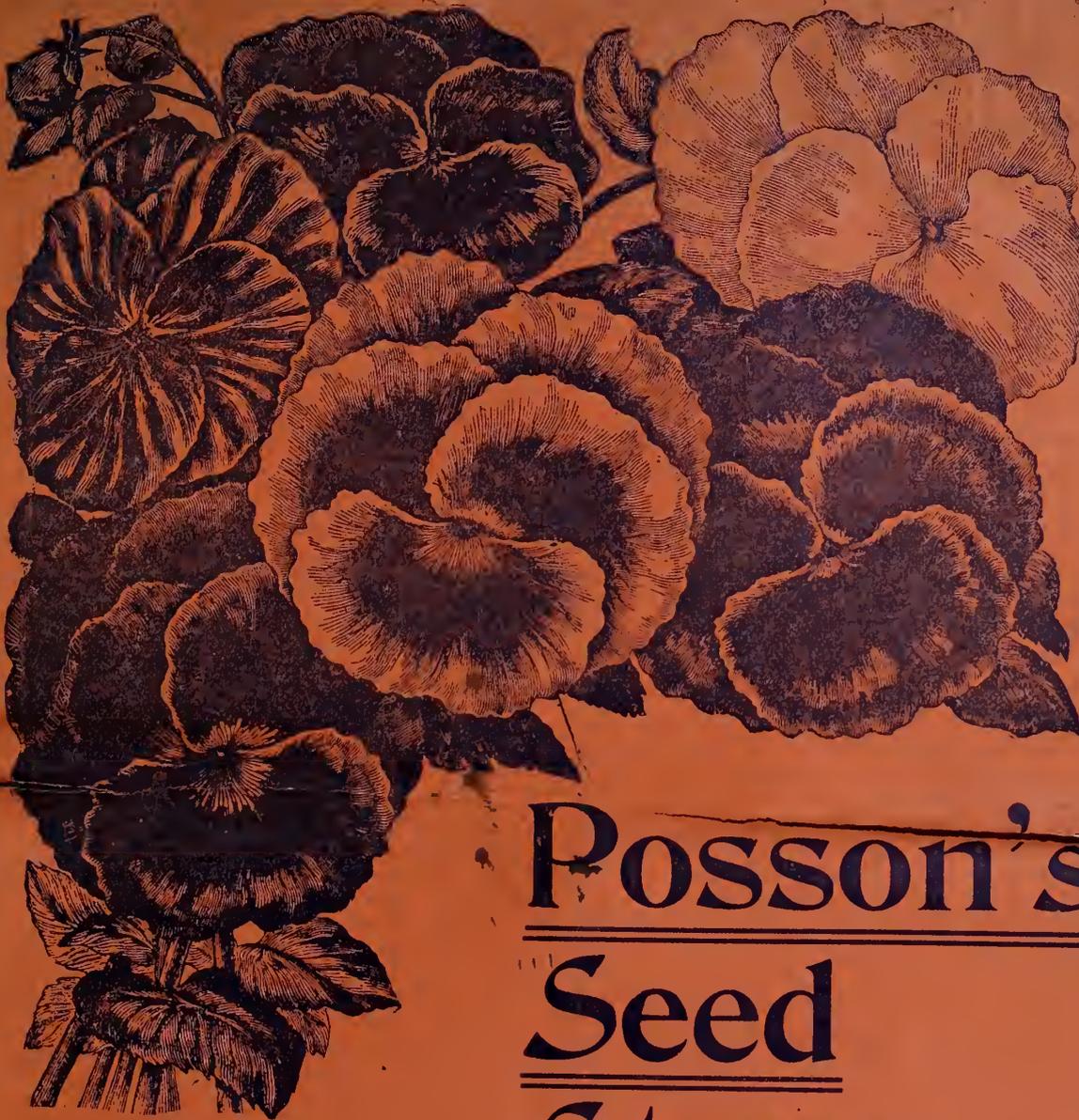
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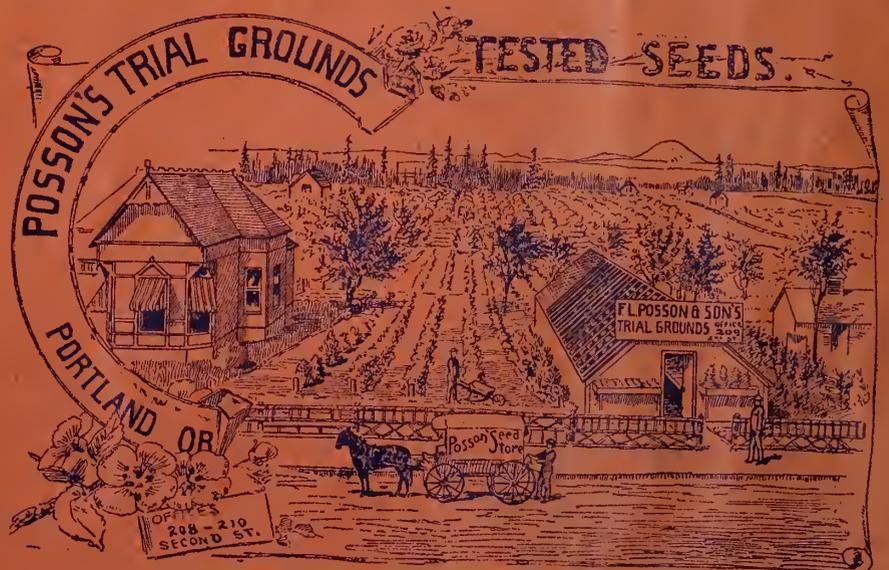
Catalogue of

Seeds
Fertilizers
Bee and
Poultry
Supplies
Trees
Plants
Implements
Etc.

Posson's
Seed
Store.



Offices and Stores, 208-210 Second St.



Experiment Grounds (40 acres) near Damascus.

PLANTS

The following Col-
lections will be
forwarded

FREE BY MAIL
OR EXPRESS

to any place in the United States.

OUR PLANTS are all strong, healthy, pot grown, and fully equal those sent out by any eastern house.

THE VARIETIES are such as our long experience has taught us are the best for our climate here in the N. W.

OUR PRICES cannot be duplicated by any other firm in the trade, quality of goods considered.

Offered by Posson's Seed Store.

Will all bloom profusely the first season.

Carnations In selecting the varieties composing this collection we carefully considered the qualifications of each sort for the special purpose we had in view, viz., to group together only such kinds as would unite in a group of twelve the greatest perfection in form and fragrance, in flowering ability, in habit of growth, in fitness for either garden or house culture, and the greatest diversity of color. After careful consideration and exhaustive tests we selected from the hundreds at our disposal, regardless of whether they were old sorts of tried merit, or new sorts of pronounced excellence, the twelve varieties named below, and believe that they cannot be surpassed for the purpose stated:

Portia, Peter Henderson, Lizzie McGowan, Anna Webb, Wm. Dreer, Silver Spray, American Banner, Day Break, Hinze's White, Tidal Wave, Marguerite, Cherry Lips.

Fifteen healthy pot grown plants of the above for One Dollar.
Seven for 50 Cents.

Chrysanthemums Ada Spaulding, Bell Paul, Count of Germane, Elaine, Fimbriatum, Gloriosum, H. E. Widener, International, Kioto, L. King, Moonlight, Marie Weighman, Emily Donner.

Seventeen healthy pot grown plants of the above for One Dollar.

Roses This collection of fifteen ever-blooming Roses contains, in our opinion, the best of the ever-blooming and bedding varieties it is possible to obtain in that number, all being invaluable for summer and winter blooming. This is, we believe, the finest collection ever grouped in one offer, and at such a low price will not permit us to illustrate them, although each is worth its price.

Athene Mermet, Marshal Neil, Lamarque, La France, Perle des Alpes, Papa Gontier, Bon Silene, Niphetos, Safrano, Homer, Mad. Lamour, The Bride, Meteor, Mme. Jos. Schwartz, Sunset.

Seventeen healthy pot grown plants of the above for One Dollar.
Seven for 50 Cents.

Mammoth Verbenas No garden is complete unless it contains a bed of Verbenas, or a border planted with them. Eight

different colors for immediate effect: B. of Oxford, deep pink; Climax, glowing scarlet; Coral, brilliant pink; Crystal, pure white; Garnet, deep crimson; Glow-worm, crimson; Invincible, rich purple; Iona, deep pink; Mattie, soft shell pink; Miss Arthur, scarlet; Mrs. Cleveland, white; Mrs. Wilson; Negro, dark maroon; Onyx, rich crimson; Purple King, deep purple.

Seventeen strong plants for One Dollar. Eight for 50 Cents.

Geraniums Eight choicest single, and nine choicest double varieties. Double: Beaute Poitevine, large flowers, immense trusses of brilliant salmon; Double Gen. Grant, scarlet; Golden Dawn,

brilliant orange scarlet; Grand Chancellor, deep crimson; La Favorite, pure white; Mme. Dupont, flowers deep scarlet; P Crozy, brilliant scarlet, very large, ivy leaved; Mrs. E. G. Hill, soft rosy salmon. Single: Apple Blossom, pearly white suffused with delicate rose, a dainty color; Gen. Grant, the finest scarlet bedder; Master Christine, bright deep pink; New Life, striped scarlet and white; Queen of the Belgians, purest white. The Seventeen strong plants for One Dollar. Eight for 50 Cents.

The Two Dollar Collection Comprises 36 fine, strong plants of our selection, no

two alike, as follows: 6 Carnations, 4 Chrysanthemums, 6 Roses, 6 Geraniums, 8 Verbenas, 4 Asters, 2 Hollyhocks—All for Two Dollars.

Combination Collection No. 1 3 Carnations, 3

Chrysanthemums, 3 Roses, 5 Verbenas and 3 Geraniums. Fifteen strong plants, all for One Dollar.

Bedding Plants The below-named are all well-known tested varieties of the leading plants that are used for "carpet bedding," "massing," "ribbon line" planting

or general bedding. We grow immense quantities of this class of stock, and we are in a position to execute large orders in a prompt, satisfactory manner, and at the lowest rates. Parties desiring large quantities will do well to write us, and we will make special prices. By mail or express prepaid.

	Per 100.
Abutilons. Assorted colors.....	\$ 6 00
Acalypha Mosaica. Handsome foliage, gorgeously variegated.....	10 00
Achyranthus. Red, also yellow.....	4 00
Ageratum. Best white and blue.....	4 00
Alternanthera. Red dwarf.....	6 00
" Yellow, dwarf.....	6 00
Alyssum. Dwarf, white.....	6 00
Begonia Vernon. Splendid bedder.....	8 00
Cannas. Light and dark foliage.....	8 00
Cannas, New French. Assorted.....	10 00
Centaurea (Dusty Miller).....	4 00
Coleus. Crimson, yellow, red, black, etc.....	5 00
Daisies. Hardy English.....	4 00
Geraniums. Double and single.....	8 00
Geranium, Mt. of Snow. Silver-leaved.....	8 00
Geraniums. Bronze-leaved.....	8 00
Golden Feather.....	3 00
Lobelias. Best dwarf, blue.....	4 00
Pansies. Finest mixed.....	4 00
Petunias. Finest double.....	10 00
" " single.....	5 00
Roses. Bedding varieties.....	7 00
Salvias. "Scarlet Sage".....	6 00
Santolina. Dwarf, silvery gray.....	6 00
Tuberous Begonias. Selected bulbs.....	10 00
Variegated Ice Plant.....	4 00
Verbenas. Red, white, blue, etc.....	4 00

Vegetable Plants.

All True to Name, Transplanted, Stocky Plants.

CABBAGE PLANTS.	By Mail			
	PER DOZ.	50	100	500 1000
Early Jersey Wakefield, best early variety.....	15c	\$.30	\$.45	\$1.75 \$3.00
Early Winningstadt, best summer.....	15c	.30	.45	1.75 2.75
Premium Late Flat Dutch.....	12c	.20	.30	1.25 2.00
Premium Late Drumhead.....	12c	.20	.30	1.25 2.00
CAULIFLOWER PLANTS.				
Early varieties.....	20c	.60	1.00	4.00 6.00
Late varieties.....	15c	.35	.65	3.00 4.00
TOMATO PLANTS.				
Optimus, the best for canning.....	20c	.30	.45	2.00 3.50
Atlantic Prize, earliest tomato grown.....	20c	.30	.45	2.00 3.50
Perfection, for main crop.....	20c	.30	.45	2.00 3.50
Acme, best purple variety.....	20c	.30	.45	2.00 3.50
CELERY PLANTS.				
Golden Self-Blanching.....	20c	.35	.50	2.00 3.75
White Plume.....	20c	.35	.50	2.00 3.75
Giant Pascal, best late.....	20c	.35	.50	2.00 3.75
SWEET POTATO PLANTS.....	25c	.40	.60	3.00 5.00
PEPPER.....	25c	.40	.60	
KALE.....	20c	.40	.60	2.50 4.00

No plants sent C. O. D.

Write for quotations if larger quantities are wanted.

Annual Catalogue.

Posson's Seed Store.

IN presenting our Catalogue No. 17, we desire to call your attention to the following points as being worthy of your most serious consideration in connection with placing your order for seeds. In deciding where to purchase the yearly supply of seeds, one should be influenced by the reliability and integrity of the seedsman and his facilities for supplying seeds in abundance of the best quality. The possible outcome in the way of profit or loss of even a small investment in seeds, is so great that quality should outweigh every other considerations. A second point of scarcely less importance is the matter of having your orders filled promptly and satisfactorily. We employ the most able specialists in the matter of growing and handling seed. We use the utmost care to have the different kinds of seeds grown in those localities and on such soils, that are best adapted to their perfect development. In producing and handling our seeds, we take every precaution to have them all of the highest quality. At our Trial Grounds we are able to test a sample of every lot of seed we offer, to see that it is of satisfactory vitality, and to ascertain if it is true and uniform in type; here we can also test novelties and seeds offered by other seedsmen, and whenever we find a variety possessing qualities of superior excellence, we lose no time and spare no expense in procuring the seed and giving it a place in our Catalogue. In short, we do every thing possible to have our seeds of the highest quality.

In the following pages we give full and accurate descriptions of the varieties we handle, and we can assure our readers that from our Catalogue they can select a list of seeds which will meet every requirement, and our prices are as low as possible, consistent with the highest quality.

We shall be gratified to receive any orders you send us, whether they are large or small, and shall give them our prompt and most careful attention.

REDUCED PRICES—The general shrinkage in values on every line justifies us, we believe, in reducing prices on many packets and ounces from 30 to 40 per cent. The same liberal quantity of seed will be filled in the packets as before and the quality maintained in every way.

The Essentials

FOR A

Good Vegetable Garden.

SINGLE square rod well prepared, judiciously planted and cared for, will be more satisfactory than an acre poorly planted and neglected. A rich, sandy loam is best, but one need not despair if that is not available. A garden which will be at least some satisfaction can be made on any soil. Whatever the soil, it must be made friable by thorough and judicious working and rich by a liberal use of fertilizers if we would have good vegetables. Of manures, well decomposed stable manure, where straw bedding is used, is the best, that where sawdust is used is not so good, and if it or shavings are used very freely the manure is almost worthless. Commercial fertilizers are excellent and may be used at the rate of four to twelve pounds to the square rod, and the more concentrated chemical fertilizers, such as nitrate of soda, superphosphate, bone meal, etc.; at the rate of one to six pounds to the rod with wonderfully good results. But wherever these commercial fertilizers are used, great care should be taken to thoroughly mix them with the soil, so that the seed and tender roots of the young seedlings will not come in direct contact with them. In a great many instances seeds and small plants are killed from neglecting this precaution. Good vegetables cannot be grown in the shade, and even if the space is limited, it is better to have a very small vegetable garden unshaded than attempt to make a vegetable garden in an orchard.

PREPARATION OF THE GROUND

Thorough preparation of the ground is of vital importance in raising good vegetables; if this work is well done, all that follows will be easier. The garden should be well plowed or spaded, taking care if it is a clay soil that the work is not done when it is too wet. If a handful from the bottom of the furrow moulds with slight pressure into a ball which cannot be easily crumbled into fine earth again, the soil is too wet, and if plowed then will be hard to work all summer. The surface should be made as fine and smooth as possible with the harrow or rake. It is generally necessary to plow the whole garden at once, and to do this in time for the earliest crops; but the

part which is not planted for some weeks should be kept mellow by frequent cultivation. Stiff clay soils are frequently wonderfully improved by trenching, that is, spading two feet deep in such a way as to leave the surface soil on top. This is accomplished by digging a trench two feet wide across one side, and a second one adjoining and parallel with it one spade deep. The remaining earth of the second trench is then thrown into the first and covered with the surface soil from a third trench; the balance of the third is then thrown into the second and covered with the surface of the fourth; and so on until all is worked over, when the soil from the first trench is used to fill the last. This is quite expensive, but often changes a soil where nothing can be grown, into one producing the finest vegetables, and its effects last for several years.

SOWING THE SEED

There is no more prolific source of disappointment and failure among amateur gardeners than hasty, careless or improper sowing of the seed. A seed consists of a minute plant minus the roots, with a sufficient amount of food stowed in or around it to sustain it until it can expand its leaves, form roots, and provide for itself, the whole enclosed in a hard and more or less impervious shell. To secure germination, moisture, heat and a certain amount of air are necessary. The first steps are the softening of the hard, outer shell, the developing of the leaves of the plant from the absorption of water, and the changing of the plant food from the form of starch to that of sugar. In the first condition the food was easily preserved unchanged, but the plant, with its undeveloped leaves and no root, was incapable of using it, while in its sugary condition it is easily appropriated, but it not used it speedily decays itself and induces decay in the plant. A seed then may retain its vitality and remain unchanged for years, while after germination has commenced, a check of a day or two in the process may be fatal. There is no time from that when the seed falls from the parent plant until it in turn produces seed, when the plant is so susceptible of fatal injury from the overabundance or from the want of sufficient heat and moisture, as

made as fine and smooth as possible with the harrow or rake. It is generally necessary to plow the whole garden at once, and to do this in time for the earliest crops; but the

between germination and the formation of the first true leaves, and it is just then that it needs the aid of a gardener to secure favorable conditions. These are:

FIRST—A proper and constant degree of moisture without being soaked with water. This is secured by making the surface of freshly dug soil so fine and the pressing of the soil over the seeds so firmly with the feet or the back of the hoe that the degree of moisture remains as nearly uniform as possible.

SECOND—A proper degree of heat, secured by sowing the seed when the temperature of the soil is that most favorable to germination. Too high a temperature is as detrimental to some kinds as one too low is to others. The proper temperature for each sort may be learned from a careful study of the following pages and the experiences of the most successful gardeners in your vicinity.

THIRD—Covering the seed to such a depth that while a uniform degree of heat and moisture is preserved, the necessary air can reach the germinating seed, and the tiny stem push the forming leaves into the light and air. This depth will vary with different seeds and conditions of the soil, and can be learned only from practical experience. In general, seeds of the size of the turnip should be covered with half an inch of earth pressed down, while corn may be an inch, beans an inch to two inches, and peas two to six inches deep.

FOURTH—Such condition of the soil that the ascending stem can easily penetrate it, and the young roots speedily find suitable food. We can usually secure this by thorough preparation of the ground, and taking care never to sow fine seed when the ground is wet. Occasionally a heavy or long continued rain followed by a bright sun will so bake and crust the surface that it is almost impossible for the young plant to find its way through it, or a few days of strong wind will so dry the surface that no seed can germinate. In such cases the only remedy is to plant again.

CULTIVATION

Not only should every weed be removed as soon as it appears, but the crust which forms after a rain should be broken up and the ground stirred as soon as it is dry enough to permit it. The more frequently and deeply the soil is stirred while the plants are

young the better, but as they develop and the roots occupy the ground, cultivation should be shallower until it becomes a mere stirring of the surface. We have seen hundreds of acres of vegetables where the yield and quality has been materially lowered by judiciously deep and close cultivation after the roots of the plants had fully occupied the ground.

HOT-BEDS.

For early vegetables, some provision for starting certain plants earlier than can be done in the open air is necessary; for this purpose nothing is better than a good hot-bed, and its construction is so simple and the expense so light that every garden should have one. A hot bed proper not only protects the plants from the cold, but supplies bottom heat. By this term the gardener means that the soil is constantly kept several degrees warmer than the air above, that being the condition so far as heat is concerned, which is most favorable for rapid and vigorous growth. It is evident that to produce this we must in some way apply our heat below the surface, and it is usually done by making a compact pile of some fermenting material and covering it with the earth in which the plants are to grow.

HEATING MATERIAL

The best heating material that is easily available is fresh horse manure, containing a liberal quantity of bedding of straw or leaves. Such manure, if thrown into a loose pile, will heat violently and unevenly and will soon become cold. What is wanted in the hot-bed is a steady and moderate but lasting heat. To secure this, the manure should be forked over and if

dry, watered and allowed to stand a few days and then be forked over again, piled and allowed to heat a second time, when, after a few days more, it will be ready for use. The object of this repeated forking over and piling is to get the whole mass into a uniform degree of fermentation.

SASH

Gardeners commonly use sash made especially for hot-beds and glazed with small lights cut from odds and ends and so furnished at very low rates. Such sash can usually be procured in any of our large cities, and cost much less than if made to order. For garden use, however, we much prefer a small size that can be easily handled, and the use of larger and better glass. We would recommend that the sash be three by five feet, and that the glass be not less than 10x14, laid with not more than one-quarter inch lap. In giving the order to one unaccustomed to the work, it would be well to state what they are to be used for, and that they need to be made like skylight sash.

THE FRAME

This may be made of sound one inch lumber, the back twelve to fourteen inches high, the front ten to twelve. It should be well fitted to the sash so as to leave as little opening as possible, and yet allow the sash to be easily slid up and down, even when the

frame is quite wet.

THE SOIL

This should be light, rich, friable. Any considerable amount of clay in it is very objectionable. If possible, it should be quite dry and unfrozen when put into the bed; for this reason it is much better to prepare it the fall before and cover the pile with enough coarse manure or straw to keep out frost.

MAKING THE BED

This requires careful attention, as future success depends largely upon the manner in which this work is done. Having cleared away all snow and ice, build a rectangular bed one foot larger each way than the frame to be used, carefully sowing and spreading each forkful, and repeatedly treading down the manure so as to make the bed as uniform as possible in solidity, composition and moisture. It is of the utmost importance that this shaking

apart and evenly pressing down of the manure should be carefully and thoroughly done; unless this is done one portion will heat quicker than the others, and the soil will settle unevenly, making it impossible to raise good plants. The proper depth of the bed will vary with the climate, season, and the kind of plants to be raised. A shallow bed will give a quick, sharp heat and soon subside; a deeper one, if well made, will heat more moderately but continue much longer. For general purposes, a bed one and a half to two feet deep will be the best.

The bed completed, the frame and sash may be put on, and fresh manure carefully packed around the outside to the very top, (if the weather is at all severe, this outside banking should be replenished as it settles.) The bed should then be allowed to stand with the sash partially open for a day or two to allow the steam and rank heat to pass off. The earth should then be put on and carefully leveled. Care should be taken that the soil is dry and friable, if wet or frozen soil must be used, it should be placed in small piles until well dried out before spreading. The heat at first will be quite violent, frequently raising to 120 degrees, but it soon subsides, and when it recedes to 90 degrees the seed may be planted. The importance of using dry soil and allowing the first rank heat to pass off is very great. Every season thousands of hot-beds fail of good results from these causes, and seedmen are blamed for failure resulting from over heat or wet soggy soil.

MANAGEMENT OF THE BED

The essentials for success are a steady, uniform degree of heat and moisture; keeping the soil at all times a few degrees warmer than the air, and the careful "hardening off" (by exposure to the air and diminishing the supply of water) of the plants before transplanting into the open air. Simple as these may seem, to be, there are many difficulties in the way of securing them, prominent among which are overheating the air under a bright sun. Without experience one would scarcely believe how quickly the temperature inside of a well built hot-house will rise to 90 or 100 degrees upon a still, sunny day, even when the temperature outside is far below freezing, or how quickly the temperature will fall to that outside, if upon a windy, cloudy day the sash is left open even so little; besides, such a rush of cold air driven over the plants is far more injurious than the same temperature when the air is still. Again, a bed will go several days without watering when kept closed during cloudy weather, but will dry up in an hour when open on a sunny day. The details of management, however, must be learned by experience, but may easily be acquired by one who gives the matter careful attention, keeping constantly in mind the essentials given above.

A COLD FRAME

Is a simple construction of boards for wintering Cabbage, Lettuce, Cauliflower, Broccoli, etc., for planting out early in the spring.

Select a dry, southern exposure; form a frame from four to six feet wide, and as long as required. The back should be fourteen, and the front six inches high, with a cross tie every three feet. Seeds of the kind to be raised in open border early in September, will be ready to plant in cold frames about the last of October. The soil should be well prepared and smoothly raked before planting. Admit air freely on pleasant days, but keep close in severe weather.

These frames are particularly useful in the South, and may be covered more cheaply with cloth shades than by sash. The shades are made as follows: Make light but strong wooden frames to fit over the bed, and of a width to receive some common brand of cotton cloth. The cloth may be unbleached, and should be stretched over and securely tacked to the frames. Coating the cloth with oil, as is sometimes recommended, we find is of no advantage, but we have found that Plant Bed Cloth is superior to ordinary cloth for this purpose.

SHADES

In the South it is frequently desirable to shade beds of seedlings. This can best be done by shades made as follows: Make light frames the length of the width of your bed, and four feet wide. To these tack common lath so as to leave from one to three inches between them. Support them about eight inches above the plants by tacking the frames to short stakes, or securing them by easily removed pins. They are more effective if the beds are so placed that the lath will run north and south.

TRANS-PLANTING

In transplanting, the main points to be regarded are: Care in taking up the plants so as to avoid injury to the roots; planting firmly so as to enable the plant to take a secure hold of the soil; reducing the top to prevent evaporation, and shading to prevent the hot sun from withering and blighting the leaves.

In transplanting from a hot-bed, harden the plants a few hours before they are taken out. It is most apt to be successful if done just at evening, or immediately before or during the first part of a rain, about the worst time being just after a rain, when the ground being wet it is impossible to sufficiently press it about the plant without its baking hard. If water is used at all, it should be used freely and the wet surface immediately covered with dry soil.

WATERING

The best time to water plants is at sunrise or just at evening. Water may be given to the roots at any time, but should never be sprinkled over the leaves in the hot sun, for it will make them blister and cover them with brown spots wherever it touches. If watering a plant has been commenced, keep on until the necessity ceases, or more injury than good will result from it; one copious watering is better than a little and often. The use of the hoe should always follow the watering-pot as soon as the ground becomes sufficiently dry.

VALUABLE TABLES.

Weight of Various Articles.

Per bush.		Per bush.		Per bush.		Per bush.			
Apples.....	48 lbs.	Clover Seed.....	60 "	*Hungarian.....	50 "	Potatoes, heaping meas- ure.....	60 "	Wheat.....	60 "
dried.....	22 "	Corn, shelled.....	56 "	Millet.....	50 "	Flour, per bbl., net.....	196 "	"	"
Barley.....	45 "	Corn, on ear.....	70 "	Oats.....	32 "	Salt, per bbl.....	280 "	"	"
Beans.....	60 "	Corn Meal.....	50 "	Osage Orange.....	33 "	"	"	"	"
Buckwheat.....	48 "	Charcoal.....	22 "	Orchard Grass.....	14 "	Rye.....	56 "	"	"
Broom Corn.....	46 "	Cranberries.....	40 "	Onions.....	54 "	Red Top.....	14 "	"	"
Blue Grass, Kentucky.....	14 "	Dried Peaches.....	28 "	Peach Pits.....	48 "	Salt, coarse.....	50 "	"	"
" English.....	24 "	Flax Seed.....	56 "	Peas, smooth.....	48 "	" Michigan.....	56 "	"	"
Bran.....	20 "	Fowl Meadow.....	12 "	" wrinkled.....	60 "	Sweet Potatoes.....	56 "	"	"
Canary Seed.....	60 "	Hemp Seed.....	44 "	Perennial Rye.....	20 "	Timothy Seed.....	45 "	Oats.....	25 1/2 "
						Turnips.....	58 "	Potatoes,	35 1/2 "

*In Chicago and all the other large seed markets of the country Hungarian is sold at 48 lbs. per bushel, so we are compelled to conform, and we buy and sell 48 lbs. per bushel.

No. of Plants or Trees to the Acre at Given Distances.

Dis. apart.	No. plants.	Dis. apart.	No. plants.								
1/2 x 1 fuch	522,720	20 x 20 Inch	15,681	30 x 24 Inch	8,712	42 x 24 Inch	6,223	60 x 36 Inch	2,901	12 x 1 Feet	3,630
1/2 x 3 "	174,240	24 x 1 "	261,360	30 x 30 "	6,970	42 x 36 "	4,148	60 x 48 "	2,178	12 x 5 "	736
1/2 x 12 "	43,560	24 x 18 "	15,520	36 x 3 "	58,080	42 x 42 "	3,566	60 x 60 "	1,743	12 x 12 "	302
16 x 1 "	392,040	24 x 24 "	10,890	36 x 12 "	14,520	48 x 12 "	10,890	8 x 1 Feet	5,445	16 x 1 "	2,722
18 x 1 "	348,480	30 x 1 "	209,088	36 x 18 "	9,680	48 x 18 "	7,790	8 x 3 "	1,815	16 x 16 "	170
18 x 3 "	116,160	30 x 6 "	34,848	36 x 24 "	7,260	48 x 24 "	5,445	8 x 8 "	680		
18 x 12 "	29,040	30 x 12 "	17,424	36 x 30 "	5,808	48 x 30 "	4,356	10 x 1 "	4,356		
18 x 18 "	19,360	30 x 16 "	13,068	36 x 36 "	4,840	48 x 36 "	3,630	10 x 6 "	726		
20 x 1 "	313,635	30 x 20 "	10,454	42 x 12 "	12,446	48 x 48 "	2,723	10 x 10 "	435		

Quantity of Seed Requisite to Produce a Given Number of Plants and Sow an Acre.

Quantity per acre.	Quantity per acre.	Quantity per acre.	Quantity per acre.
Artichoke, 1 oz. to 500 plants.....6 oz.	son Trefoil.....8 lbs.	Grass, Red Top, Fancy Clean...8 to 10 lbs.	Peas, garden, 1 pt. to 100 feet of drill 2 bu.
Asparagus, 1 oz. to 800 plants.....1 lb.	lb. Clover, Medium.....10 "	" Timothy.....1/4 bu.	" field.....2 "
Asparagus Roots.....7250	Collards, 1 oz. to 5,000 plants.....2 oz.	" Hemp.....1/2 "	" Pepper, 1 oz. to 1,500 plants.....3 oz.
Barley.....2 1/2 bu.	Corn, rice, (shelled).....2 qts.	Horse Radish Roots.....15000 to 20000	Potatoes.....8 bu.
Beans, dwarf, 1 1/2 pts. to 100 ft. of drill 1 "	" Corn, sweet, 1/4 pt. to 100 hills.....5 "	Kale, 1 oz. to 5,000 plants.....2 "	Pumpkin, 1/2 quart to 100 hills, 3 to 4 lbs.
Beans, pole, 1 1/2 pts. to 100 hills.....1/2 "	" Cress, 1/2 oz. to 100 feet of drill.....12 "	lbs. Kohl Rabi, 1/2 oz. to 100 feet of drill. 4 "	lbs. Radish, 3/8 oz. to 100 ft. of drill, 10 to 12 lbs.
Beet, garden, 1 oz. to 100 ft. of drill. 7 "	lbs. Cucumber, 1 oz. to 100 hills 1 to 2 "	" Leek, 1/2 oz. to 100 feet of drill.....4 "	" Rye.....1 1/2 bu.
Beet, Mangel, 1 oz. to 100 ft. of drill. 5 "	" Egg Plant, 1 oz. to 2,000 plants.....4 oz.	oz. Lettuce, 1/4 oz. to 100 feet of drill...3 "	" Salsify, 1/2 oz. to 100 feet of drill.....8 lbs.
Broccoli, 1 oz. to 5000 plants.....2 "	oz. Endive, 1/2 oz. to 100 feet of drill.....4 1/2 "	lbs. Martynia, 1/2 oz. to 100 feet of drill...5 "	" Spinage, 1/2 oz. to 100 feet of drill.....8 lbs.
Broom Corn.....10 "	lbs. Flax, broadcast.....1/2 bu.	bu. Melon, Musk, 1 oz. to 100 hills 1 to 2 "	" Spurry.....15 "
Brussels Sprouts, 1 oz. to 5,000 plants. 2 "	oz. Garlic, bulbs, 1 lb. to 10 feet of drill bu.	Melon, Water, 4 oz. to 100 hills 1 1/2 to 2 "	" Summer Savory.....3 1/4 "
Buckwheat.....1/2 "	bu. Gourd, 2 oz. to 100 hills.....2 "	Nasturtium, 2 oz. to 100 feet of drill 15 "	" Sunflower.....8 "
Cabbage, 1 oz. to 5,000 plants.....2 "	oz. Grass, Blue, Kentucky.....2 "	Oats.....2 "	bu. Squash, Summer, 4 oz. to 100 hills.....2 "
Carrot, 1/4 oz. to 100 feet of drill.....2 1/2 lbs.	" Blue, English.....1 "	" Okra, 1 1/2 oz. to 100 feet of drill.....8 lbs.	lbs. Winter, 8 oz. to 100 hills.....2 "
Cauliflower, 1 oz. to 5,000 plants.....2 1/2 oz.	" Hungarian and Millet.....1 1/2 "	" Onion Seed, 1/2 oz. to 100 ft of drill 4 to 5 "	" Tomato, 1 oz. to 4,500 plants.....1 oz.
Celery, 1 oz. to 15,000 plants.....2 "	" Mixed Lawn.....3 to 5 "	" " for Sets.....40 to 80 "	" Tobacco 1 oz. to 5,000 plants.....2 "
Chicory.....4 lbs.	lbs. Orchard, Perennial, Rye, Red Top, Fowl Meadow and Wood Meadow.....2 "	Onion Sets, 1 quart to 40 feet of drill 8 "	bu. Turnip, 1 oz. to 250 feet of drill.....1 1/2 lbs.
Clover, Alsike and White Dutch.....6 lbs.		Parsnip, 1/4 oz. to 100 feet of drill.....3 "	lbs. Vetches.....2 bu.
" Lucerne, Large Red and Crim-		" Parsley, 1/4 oz. to 100 feet of drill.....3 "	lbs. Wheat.....1 1/4 "

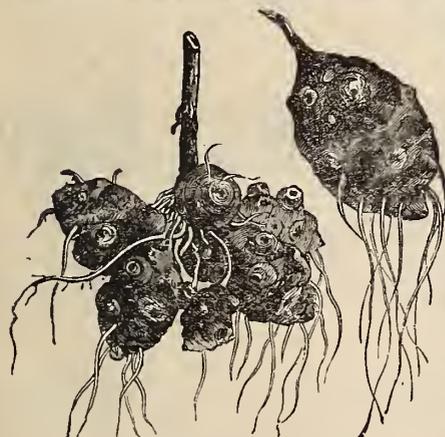
In Your Own Interest.

PLEASE NOTE—That our prices, except where otherwise stated, include payment of postage by ourselves. If Goods are to be sent by Express or freight, at Purchaser's Expense, 8 CENTS PER POUND SHOULD BE DEDUCTED.

ARTICHOKE.

French, *Artichaut*. German, *Artischoke*.

CULTURE.—Sow in hot-beds and transplant into pots, or so as to give plenty of room until danger of frost is over, and then set in very rich ground, in rows four feet apart and two feet apart in the rows; or the plants can be raised in seed beds out of doors, but in that case will not be likely to produce heads the first year. The edible portion is the undeveloped flower heads, which will be produced about September 1st, and until frost. Late in the fall cut off the old tops and protect the crown with leaves or straw to prevent severe freezing. The second year they will commence to form heads about July 1st. The plants may also be blanched like Cardoons, which is accomplished by cutting back the growing stems in July, close to the ground, when the young and rapidly growing shoots which start up after cutting, may be tied and blanched like Celery. As Artichoke plants



Tubers of Jerusalem Artichokes.

do not yield satisfactorily after three or four years, it is best to start a new plantation in three years at least.

LARGE GLOBE—The best sort for table use. Buds large, nearly round; scales deep green, shading to purple, very thick and fleshy. Pkt 5c, oz 25c, 1/4 lb 90c.

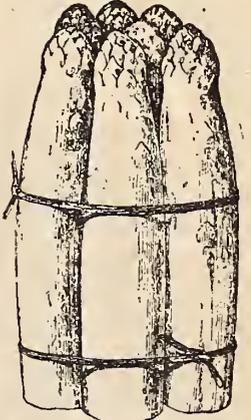
JERUSALEM—Grown exclusively for its tubers which somewhat resembles potatoes, and are cultivated in a similar manner, only that the rows should be at least four feet apart when growing in strong soil. It is enormously productive, producing 1500 bushels per acre. It is used mostly in feeding sheep and hogs. Peck 40c, bu \$1.

ASPARAGUS.

French, *Asperge*. German, *Spargel*.

Asparagus is one of the earliest spring vegetables, and would be in universal use were it not for the prevalent idea that it is difficult to grow it. We think this is a mistake, and that there is no vegetable on our list that can be produced so cheaply and easily as this. It delights in a moist, sandy soil, but can be grown in any garden by following the directions given below. A bed 15x50 feet, requiring 50 to 75 plants, should give an abundant supply for an ordinary family.

CULTURE.—Beds are usually formed by setting plants one or two years old, which can be procured of us. But if you wish to grow them yourself, prepare a light, rich spot as early as possible in the spring. Pour boiling water on the seed and pour it off at once, and sow in drills one foot apart and two inches deep. When the plants are well up, thin to two or three inches in the row, and give frequent and thorough cultivation during the summer. If this has been well done, the plants will be fit to set next spring. The permanent beds should be prepared by deep ploughing or spading, and thoroughly enriching the ground with stable manure or other fertilizers. If the subsoil is not naturally loose and friable, it should be made so by thoroughly stirring with a subsoil plow or the spade. Make rows five feet apart and four inches deep and set the plants in the bottom of the rows two to three feet apart, the latter distance being preferable. Cover the roots about two inches deep. After the plants are well started, give frequent and thorough cultivation, and draw a little earth into the furrows at each hoeing until they are filled. Early the next spring spade in a heavy dressing of manure, and one quart of salt to each square rod, and cultivate well until the plants begin to die down. The next season the bed may be cut over two or three times, but if this is done all the short shoots, no matter how small, should be cut, and after the final cutting, give a good dressing of manure, ashes and salt. The next season, and ever after that, the bed should give a full crop and be annually dressed with manure, ashes and salt, after the last cutting, and well, but not deeply, cultivated until the plants occupy the whole space. In the autumn, as soon as the tops are ripe and yellow, they should be cut and burned. The plants may also be set in autumn, if the ground is so well drained that water will not stand on it. Winter protection with coarse litter or manure is not needed, except in the extreme north.



COLUMBIAN MAMMOTH WHITE—We believe this to be the most distinct and valuable variety in cultivation. Not only are the stalks of the largest size, but they are produced abundantly and very early. They are clear white, and remain so in favorable weather, until three or four inches above the surface. The crown or bud of the young stalk is considerably smaller than the part just below it; thus still further distinguishing the variety. Wherever known this sort commands an extra price, not only on a fancy market, but from canners, who find that when put up, under a special brand, it sells so readily at a high price as to warrant them paying the grower an extra price for it. From ten to twenty per cent of the plants grown from seed will produce green shoots, but these plants can be readily distinguished and rejected when setting the permanent bed. Pkt 5c, oz 10c, 1/4 lb 35c.

CONOVER'S COLOSSAL—A mammoth green sort of the largest size and of good quality. The best of the old kinds. Pkt 5c, oz 10c, 1/4 lb 20c, 1 lb 50c.

PALMETTO—A sort which has proven very popular with many gardeners; produces a moderate number of shoots, but these are very large and of the finest quality. Pkt 5c, oz 15c, 1/4 lb 50c, 1 lb \$1.50.

BEANS DWARF, BUSH OR SNAP

French, *Haricot*. German, *Bohne*.

Under this name are classed all the low growing sorts called in different catalogues *Bush, Bunch, Snap, String or Dwarf Beans*.

CULTURE.—No crop responds more readily to good soil and cultivation than this. The soil best adapted to them is a light, rich, well-drained loam, which was manured for the previous crop. If too rank manure is used it is apt to make them grow too much to vine. They are all extremely sensitive to both drought and wet, and it is useless to plant them before the ground has become dry and warm. The largest return will result from planting in drills about three feet apart, and leaving to six plants to the foot of row. Up to the time of blossoming they should have frequent shallow cultivation, but any cutting of the roots after the plants come into bloom is liable to cause the blossoms to blast, and so cut off the crop. Remember that beans should always be cultivated very shallow, and that it is useless to expect a crop from a field so poorly prepared as to need deep stirring after planting.

In the following descriptions the varieties are placed about in the order of ripening, and it is assumed that they are grown on rich, light soil, as different soils produce quite a variation in vines, pods and beans, and it is useless to expect good results from the finer garden sorts on poor or cold and wet soils. From one pint to two quarts will be sufficient to furnish a supply for an ordinary family, and varieties should be selected so as to give a succession both of string and green shelled beans. The wax podded beans are particularly liable to run "off" into green podded plants, and it requires constant attention and skillful selection by seedsmen to keep them pure, so that it is especially important to buy only from reliable sources.

Challenge Dwarf Black Wax—Extra early. Continued experience has only strengthened our opinion of this grand bean, and the enormous demand for it by our customers is the sure index to the fact that it meets a popular demand and has all the sterling qualities we claim for it. The feature impressing one most forcibly when comparing this bean, as an extra early sort, with other varieties growing beside it, is that when one can find in other kinds an occasional very early plant, all the plants of the Challenge will give a full picking of well matured pods. This habit of ripening a large proportion of the crop earlier than other kinds, is of inestimable worth to market gardeners and all who depend on being first in the market for the best prices. The plants are fully as vigorous as the Prolific German Wax, and in habit of growth and general appearance resemble them. They are not quite so large and are a little more upright, and the leaflets are a little larger and coarser and are darker green; pods fully as large and of as good color, but are not quite so much curved and are flatter, though stringless and of excellent flavor. Pkt 10c, lb 12½c, ¼ bu \$1.50, bu \$5.75.

Wardwell's Kidney Wax—The vines of this variety are very large, strong growing, but are peculiarly liable to blight, but when healthy, yield a large crop of long, nearly straight, handsome, very white and wax-like pods. They are of good quality, and on this account, as well as their beauty of form and color, are easily sold. They ripen about the same time as the Golden Wax. The dry beans are large, kidney-shaped, white with dark markings about the eye. Market gardeners find this a profitable variety, owing to the large size and handsome color of the pods. Pkt 10c, 1 lb 14c, ¼ bu \$1.65, 1 bu \$6.00.

Black-Eyed Wax—Vines medium size, erect, bearing the pods near the center. Leaves large, thin, dark green. Pods long, straight, proportionately narrow, and rounder than those of the Golden Wax, and of a lighter color, with a medium length light green point. They cook quickly, both as snap and as shell beans. Dry beans medium size, long, cylindrical, white, with black spot around the eye. As early as the Golden Wax, of very good quality, and in some localities esteemed highly as a first early variety, but we think it inferior in quality and earliness to the Challenge Black Wax. Pkt 10c, 1 lb, 15c, ¼ bu \$2.00, 1 bu \$7.00.

Golden Wax—This bean has long been and still continues the standard wax variety for general use, and while many varieties have been introduced, claiming to be superior in some respects and aiming to replace it, they have all sooner or later been forced to the rear as not possessing as many good qualities in as high degree. Vines medium size, erect, moderately spreading, hardy and productive, with small, smooth leaves, and small, white blossoms. Pods are long, nearly straight, broad, flat, golden yellow, very fleshy and wax-like, with short, fleshy, green point, cooking quickly as snaps, shelling well when green, and of the highest quality in both conditions. Beans medium size, oval, white more or less covered with two shades of purplish red. Our stock of this variety is unsurpassed. Pkt 10c, 1 lb 14c, ¼ bu \$1.50, 1 bu \$5.75.

Detroit Wax—Very hardy. The very productive, erect growing plants bear their pods very near the center of the vines, but occasionally throw a stem above the leaves. Leaves large, dark green; blossoms small, white; pods straight, flat, but thick to edge; distinctly broader than the Golden Wax. They are frequently greenish yellow when young, but when well grown and fit for use they are of a beautiful golden wax color, and of good quality. We think this quality the least liable to rust of any, and the fact that other seedsmen offer it under other names as *absolutely* rust-proof, is evidence that they have found it as nearly rust-proof as any wax bean can be. When picked along with Golden Wax and other varieties, it keeps bright and crisp long after these are wilted and unsalable, making it one of the best for shipping long distances. It is also one of the very best green shelled beans, and excellent dry, being very much like the White Marrow when baked. Dry beans the shape of the White Marrow,

white with large patch of chocolate brown about the eye. Pkt 10c, 1 lb 14c, 1 bu \$7.50.

Speckled Wax—As the merits of this splendid variety become known it is coming more and more into favor as a late crop wax bean. It is the best sort to follow Challenge, Black Wax, Golden Wax, Prolific Wax for a succession. Vines large, much branched, upright, extremely hardy, vigorous and great producers; leaves large and coarse, resembling Kidney Wax. Pods long, cylindrical, crisp, tender, stringless, and of a clear, yellowish, waxy-white color. As the pods mature they are excellent to use as green shell beans. Dry beans, medium size to large, long, straight, cylindrical; color light brown, mottled and striped with chocolate brown. For vigor of growth and hardiness, this sort cannot be excelled; as a snap bean it is of extra good quality, and as a shell bean it is as good as the best. As a general crop bean, to be used either as snaps, green shelled or in the dry state, we can confidently recommend it. Owing to its long, cylindrical, very fleshy pods, we think it will be very satisfactory for canner's use. Pkt 10c, 1 lb 15c, 1 bu \$7.00.



Davis Wax Bean

The Best FOR MARKET GARDENERS FOR CANNERS

Extensive trial has proved that this new bean is the best white seeded wax podded

Bean Known

The plant is vigorous and healthy, of compact, upright growth, carrying its pods on the center and well up from the ground. It is very productive, always giving a large yield of handsome pods with as small proportion of imperfect and misshaped ones as our Golden Wax. The pods are very long, oval, clear waxy white color, and when of suitable size to use for snaps quite stringless, showing no tendency to string until they approach maturity. This illustration is an accurate reproduction of a group produced by ordinary field culture, with one of its pods shown the exact natural size.

PRACTICAL MARKET GARDENERS ARE DELIGHTED WITH IT,

because of its hardiness, productiveness, handsome appearance, its good shipping and selling qualities, and the small proportion of waste and second quality pods. Canners say, it is just what we want, a long, straight clear white pod which does not discolor in canning. The large, white, handsome kidney shaped dry beans are attractive, and this new bean is sure to become a very popular and standard sort. Pkt 10c, 1 lb 50c, 5 lbs \$2.



BEANS

Names of Varieties Shown in the illustrations.

No. 1—Challenge Dwarf Black Wax. No. 2—Black Eyed Wax. No. 3—Detroit Wax. No. 4—Golden Wax. No. 5—Early Golden Cluster Wax Pole. No. 6—Extra Early Refugee.

Early Yellow Kidney Six Weeks—Vines large, vigorous, branching, productive, with large leaves and lilac blossoms; pods, long, straight, narrow, handsome, and when young of good quality; beans long, kidney shaped, yellowish-drab with darker marks about the eye. Pkt 10c, 1 lb 14c, bu \$4.50.

The following are green podded varieties, and are named about in the order of their ripening, although this varies in different seasons.

Round Yellow Six Weeks, Improved Round Pod—While this variety does not differ from the Early Yellow Kidney Six Weeks in size or general appearance of the vine, the pods are shorter, very much thicker, more fleshy. Moreover, while retaining the vigor and hardness of the old sort, it is fully one week earlier. Dry bean, color of ordinary Six Weeks, but is much shorter, almost round. Pkt 10c, 1 lb 14c, ¼ bu \$1.50, 1 bu \$5.50.

Early Mohawk—This sort is so much hardier than the others that it can be planted earlier, and often in this way will furnish beans fit for use before any other kind. Vines large, stout, with large, coarse leaves which will stand a slight frost; blossoms large, purple; pods long, straight, coarse, with long, tapering point; beans long, kidney shaped, variegated with drab, purple and brown. This variety is much in favor for forcing under glass, as it matures quickly and carries a good weight of long, large pods. Pkt 10c, 1 lb 14c, 1 bu \$4.50.

Early China Red Eye—Vines medium, stout, erect, healthy with large leaves and white blossoms; pods short, straight, flat, and if picked young, of good quality as snaps; beans medium size, oblong, white, with reddish-purple blotch about the eye. When green they are thin skinned, mealy and tender, and when dry are still the best of all for haking; although they cook dark are the best of all in flavor. Farmers who want to plant a few beans for home supply, should by all means use this sort. Pkt 10c, 1 lb 14c, 1 bu \$4.50.

Dwarf Horticultural—Vines compact, upright, with large leaves; very productive, and furnish green shelled beans the earliest of any. Pods medium length, cylindrical, curved, with splashes of bright red on a yellowish ground. The ripe beans are large, oval, plump, and nearly covered with splashes of bright red. This is undoubtedly the best variety for use shelled green, and when in this condition the beans are very large, easily shelled, and although of quite different form, are about equal to the Lima in quality. Pkt 10c, 1 lb 15c, ¼ bu \$1.50, 1 bu \$5.00.

Where Peas, Beans or Corn are wanted by mail, add 8 cts. per pound to pay postage.

Extra Early Refugee—The earliest of the green podded kinds furnishing a fleshy pod of fine quality. With us it is usually fit to pick as soon our Golden or Detroit Wax, and is from two to three weeks earlier than ordinary Refugee. The vines, though a little smaller, are fully as hardy and vigorous as that variety, and more upright growing, and the foliage is distinctly lighter colored. Pods of the same size and shape, except slightly flatter, and of fully as good quality as snaps. Dry bean same size, shape and color as common Refugee. Our stock has been selected with great care, and is extremely uniform, all the vines ripening well together. Pkt 10c, 1 lb 14c, ¼ bu \$1.50, 1 bu \$5.00.

Early Red Valentine, Improved Round Pod—For snaps there is nothing superior to this variety among the green podded sorts and many prefer it to the wax varieties. Vines erect, with coarse, dark green leaves, and large, white blossoms; pods medium length, curved, cylindrical, with crease in back, very fleshy, crisp and tender; beans medium size; long, irregular, pink, marbled with red. Among green podded varieties there is none, we think, that can compare with our stock of Valentine in fleshiness and high quality of pod. Many different strains of Valentine are offered under slightly varying names, each claiming to be a great and distinct improvement. We have carefully examined them all, both in trials and in large yield, and have found none which we were willing to substitute for our old stock, which combines to a high degree all the good qualities of the sort. Pkt 10c, 1 lb 14c, ¼ bu \$1.40, 1 bu \$5.00.

The following sorts are planted as field Beans:

Royal Dwarf Kidney—Not as productive as some of the following, but of very superior quality. Plant large, branching, with large, broad leaves and white flowers; pods medium sized, variable in shape, dark green, coarse; beans large, kidney shaped, slightly flattened, and of excellent quality, green or dry. Pkt 5c, 1 lb 10c, ¼ bu \$1.20, 1 bu \$4.25.

Early Marrow Pea, or Dwarf White Navy—A variety developed in Western New York, and not only a sure cropper and much more prolific, but of better quality than the common white bean, and the beans are so hard as to resist the attacks of the bean weevil. Vines large, spreading, with occasional runners, and small, thin leaves, and small, white flowers; very prolific, ripening its crop early and all at once; pods short, straight, small, but containing six beans; beans small, oval, white, handsome and of superior quality. Pkt 5c, 1 lb 10c, ¼ bu \$1.20, 1 bu \$4.25.



The Product of One Tree Beans. 156 Pods. 864 Beans From a Single Bean.
(From a Photograph of a Dried Stalk.)

Improved Tree Bean—The true stock is easily the heaviest yielding bean known. The illustration above is an exact reproduction from a photograph of a vine which bore 156 pods, and which shelled out 864 beans, the product of one bean. Its close resemblance to the well-known Navy would deceive all but experts, and this has led to frequent substitution. The Tree Bean will thrive wherever the Navy will mature. Ten to twelve quarts will plant an acre. We are headquarters for the genuine Tree Bean.

It is to us a source of constant wonder that Bean growers, otherwise intelligent, should plant mixed seed. A visitor to the commission houses of any large city can see thousands of bushels of Beans, clean, bright, and of good sample but badly mixed as to variety. This always results in a loss to the grower, as any variety of Beans in order to bring the highest market price must be straight stock. Let us say, for example, that straight Navy Beans are worth \$2.50 per bushel; Medium Beans, \$2.25; Marrows, \$2.15. If mixed with each other they would sell at a discount of from 50c to \$1.00 per bushel from these prices. Let us do a little fig-

uring and see what farmers would gain by planting pure seed, taking 30 bushels per acre as a crop:

Additional price of 50 cents per bushel, 30 bushels, \$15.00. Less extra cost, $\frac{1}{2}$ bushel of seed, \$1.00. Net gain, \$14.00.

Can farmers afford to lose \$10.00 to \$20.00 per acre when they can gain from one to two thousand per cent. on the investment by planting pure seed? Pkt 10c, 1 lb 15c, $\frac{1}{4}$ bu \$1.50, 1 bu \$5.50

DWARF LIMA SORTS.

Dwarf Large White Lima (Burpee's)—A bush form of the true Large Lima. The plants are uniformly dwarf, but enormously productive; single plants under favorable circumstances often yielding from 150 to 350 pods. The pods are as large as those of the Large Lima, and contain from four to six very large, flat beans of the best quality. Pkt 10c, 1 lb 25c.

BEANS. POLE OR RUNNING.

French, *Haricots a rames*. German, *Stangenbohne*.

CULTURE.—These are even more sensitive to cold and wet, as well as to droughts and hot winds, than the dwarf varieties, but are of superior quality and productiveness. After settled warm weather, set poles four to eight feet long in rows north and south, four feet apart, the poles being three feet apart in the row, and set leaning to the north at an angle of about thirty-five degrees. Set in this way the vines climb better, bear earlier, and the pods are straighter and more easily seen. Around each hill plant five to eight beans, two inches deep. When well started, thin to four plants, and start any that fall to climb around the pole in the same way as the others, for they will not grow if tied up in the opposite direction. Another plan is to plant in rows thickly enough so that there will be one plant to eight or ten inches. Set posts five feet high firmly at each end of the rows, and drive stakes made of 2x2 lumber at intervals of sixteen feet along the rows. Stretch a wire (10 or 12 size) between posts along each row and fasten to the tops of the stakes in the row with wire staples. Run a light wire or twine along the row about six inches from the ground and fasten to the posts and stakes with wire staples. Tie cotton string to the wire above and the wire or twine below, wherever there is a plant. The vines will run up to these until they reach the top wire, when they will care for themselves; or omit the lower wire or twine and tie the cotton string to the wire on top of the posts and to a small peg or stick stuck in the ground by the side of each plant. A pint each of four or five varieties will be sufficient for a large family.

WAX PODDED VARIETIES.

Golden Champion—We think this the earliest and at least one of the best of the wax podded pole beans. Vines medium size to large with golden-yellow stems; leaves very light green, strongly tinged with yellow, giving the whole plant a golden-yellow appearance; flowers pink; pods long, cylindrical, much curved, very fleshy, stringless, bright golden-yellow color, of excellent flavor, and borne in clusters; dry bean long, narrow, flat, kidney-shape, bluish-black. The points of superiority in this variety are extreme earliness, great prolificness, and the unusually fine color and quality of the pods. Pkt 10c, 1 lb 20c, $\frac{1}{4}$ bu \$2.25.

Early Golden Cluster Wax—A well known early and very beautiful sort. Vines large, strong growing, vigorous, hardy; leaflets large, light green, crimped; flowers yellowish-white; pods six to eight inches long, borne in abundant clusters, each containing from three to six pods, broad, very thick and fleshy, deeply creased along the edge to which the beans are attached, much curved; color bright golden-yellow; of the very best quality, and staying in condition for use a long time. The beans are also excellent shelled green. We recommend this variety as furnishing the largest and handsomest pods of any sort in the list. Pkt. 10c, 1 lb 20c, $\frac{1}{4}$ bu \$2.25.

Indian Chief, or Tall Black Wax—Vines large, but often do not take to poles well; leaves large, rough; blossoms purple; pods short, broad, fleshy, white, very wax-like, and of superior quality as snaps, remaining in suitable condition longer than most varieties; beans indigo blue, medium size, oblong, shortened abruptly at the ends. Pkt 10c, 1 lb 15c, 1 bu \$6.50.

GREEN PODDED VARIETIES.

Horticultural Lima—A cross between the Dwarf Horticultural and Dreer's Improved Lima, combining the good qualities of the latter with the earliness of the former. We have tested it thoroughly and have found it fully as early as the Dwarf Horticultural and as prolific as Dreer's Improved Lima. Its extreme earliness and hardness will permit of its being planted far north of where any true Lima bean can be grown, while its prolificness and the quality of the green shelled beans make it a desirable addition to any garden. Vines medium size, not much branched, and not running over four feet usually, but fruiting freely to the ends; leaves large, coarse, wrinkled, green, resembling Dwarf Horticultural; flowers medium size, white; pods borne in clusters, three to six inches in length, flat, almost straight, terminating abruptly to a short point, green, and usually carrying six beans; dry beans marked the same as Dwarf Horti-

cultural, though the ground color is a little darker. They cook dark, but we consider them fully equal to Limas in quality, combining the excellencies of both the Horticulturals and the Limas. We advise all our customers to give this bean a thorough trial, as it is a variety of undoubted merit. Pkt 10c, 1 lb 20c, 1 bu \$8.00.

London Horticultural, or Speckled Cranberry—Vines moderately vigorous, with large, light colored leaves and purple blossoms; pods short, broad, pale green, but becoming streaked with bright red; beans large, ovate, splashed and spotted with wine red, and of the highest quality either green or dry, many people esteeming them better than the Limas. Pkt 10c, 1 lb 20c, 1 bu \$8.00.

Dutch Case Knife—Vines moderately vigorous, climbing well, but not twining so tightly as some, and so may be used for a corn-hill bean. Leaves large, crimped; blossoms white; pods very long, flat, irregular, green, but becoming cream white; beans broad, kidney shaped, flat, clear white, and of excellent quality, green or dry. Pkt 10c, 1 lb 15c, 1 bu \$7.00.

Yard Long, or Asparagus Bean—This is quite a curiosity, and is planted extensively in this section by the gardeners, being exceedingly profitable. It is a Pole Bean, with dark green foliage, and pods growing two feet and upward in length. The pods of such extraordinary length are produced abundantly. Pkt 10c, 1 lb 25c, 1 bu \$10.00.

English, or Broad Windsor Bean—These are well known in England and largely grown there. We catalogue them now for the first time, owing to the frequent calls our customers have made upon us for them. Pkt 10c, 1 lb 15c, 1 bu \$3.50.

White Runner—Cultivated chiefly for its flowers. Vines and leaves large and coarse; blossoms in long racemes, large, pure white; pods large, broad, coarse; beans large, kidney-shaped, thick, white, fair quality. Pkt 10c, 1 lb 35c.

Scarlet Runner—Similar to the last, but with scarlet blossoms, and the beans are lilac-purple, variegated with black. Pkt 10c, 1 lb 35c.

LIMA VARIETIES.

Early Jersey Lima—An improved strain of the Extra Early Lima, and is the earliest of the large seeded varieties. Vines vigorous and productive; leaves large, long, pointed, light green; blossoms white; pods borne in clusters, large, broad, flat, containing three to five beans, which are equal in size and quality to the Large White Lima. Pkt 10c, 1 lb 20c.

Challenger Lima—Similar to, but a decided improvement on Dreer's Improved. The vines are more prolific, and the pods are larger, though of the same shape. Dry beans larger and of the best quality. We cannot say too much in favor of this bean. It is early and continues bearing its closely crowded clusters of pods until cut off by frost. Market gardeners in the vicinity of New York are not willing to plant any other variety of Lima, as they claim this to be incomparably more profitable. It is also a sure cropper in the South. Pkt 10c, 1 lb 20c.

BEET

French, *Betterave*, German, *Runkel-Rube*.

CULTURE—See page 7.

Detroit Dark Red Turnip—Extended experience has shown this variety to be one of the very best sorts, not only for market gardeners, but for the home garden. Its small upright-growing tops, early maturing, the splendid shape and color of the roots, make it popular with every one who plants it. Tops small, upright-growing, so that the rows may be close together; leaf-stems and veins dark red, blade green; roots globular or ovoid; peculiarly smooth; color of skin dark blood-red, flesh bright red, zoned with a lighter shade, very crisp, tender and sweet, and remaining so for a long time. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, 1 lb 60c.

Improved Early Blood Turnip—An extra selected stock of blood turnip, having large, coarser tops and roots than the Detroit Dark Red, and requiring a considerably longer time to mature. Excellent for summer and autumn use. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, 1 lb 50c.

Edmand's Early Blood Turnip—This beet, of American origin, has, by careful selection, been brought to a uniformly smooth root and small top, making it among the best for early table use. Tops low, small spreading; leaf stalks and ribs dark red; blade of leaf dark green, and having a markedly wavy edge; roots dark red, interior color dark purplish red, zoned with a lighter shade; crisp, tender, sweet, and an excellent keeper. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, 1 lb 50c.

Bastain's Early Blood Turnip—Tops small, stems purplish pink, leaves bright green, roots turnip shaped, with medium size tap, bright red. Flesh purplish red, zoned with white, crisp, tender, very sweet and of good quality. Although coarser, this is preferred by some to the above described darker sorts. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, 1 lb 50c.

If Peas, Beans and Corn are wanted by mail, add eight cents per pound for postage.

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208-210 Second Street, PORTLAND, OREGON!

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Enclosed find Express Money Order for \$.....; Draft, \$.....; Cash, \$.....

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QUANTITY

ARTICLES

PRICE

Amount carried forward.

QUANTITY

ARTICLES

PRICE

Amount brought forward.

Total amount of Order.

REMARKS:

Beets and Mangel Wurtzels

FOR TABLE AND STOCK.

BEET

French, *Betterave*, German, *Runkel-Rube*.

CULTURE.—The best results are obtained on a deep, rich sandy loam. If wanted very early sow in hot-beds and transplant, cutting off the outer leaves. For general crop sow as soon as the ground will permit, in drills eighteen inches apart, and thin out to three inches in the row. For winter use, the turnip varieties may be sown in June. If possible, always sow in freshly prepared soil, which should be pressed firmly over the seed. A supply may be had for winter use by storing in a cellar and keeping covered with sand, or sandy soil, to prevent wilting, or they may be kept out doors in pits such as are used for apples and potatoes. One or two ounces or single packets of four or five sorts will give a good supply.

Extra Early, Egyptian Blood Turnip—Probably the best variety for forcing, and is also excellent for first early crop out of doors, being very early, with small top. Leaf stems and veins dark red, leaf dark green, dotted with red; roots very dark red, rounded on top, but flat beneath, with very small tap roots; flesh dark red,

zoned with lighter shade; hard, crisp and tender when young, but becoming woody with age. We have found no strain of Crosby's or other Egyptian equal to that we offer. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Early Eclipse—An improved extra early sort. Tops small, dark purplish-green shading to lighter color on outside of the leaves. Roots nearly globular with a small tap root and very small collar. Flesh dark red, zoned with a lighter red; very sweet, crisp and tender, especially when young. One of the most desirable sorts for bunching. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Early Turnip Bassano—Not maturing as early as the above, but growing to a large size; may be used early, and is the best variety to sow for greens. Tops large, leaf stems light red, leaves light green, roots large, round, turnip shaped; flesh pink, zoned with white, very sweet and tender when young, becoming woody and tasteless with age. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Half Long Blood—This is an entirely distinct variety, and by far the best for winter use. The roots are about one-half as long as the Long Dark Blood, but on account of their thickness weigh quite as much. They are always smooth and handsome, and their rich, dark red flesh is very sweet, crisp and tender, never becoming woody, even in portions above the ground. We consider this the most valuable among recent introduction. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

Improved Long Dark Blood—Tops large, neck small, leaf stems and vines red, leaf green, roots large, tapering towards both ends, growing even with the surface, dark red, flesh dark red, zoned with lighter shade, very tender and sweet, and remaining so when kept till spring. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

Swiss Chard or Sea Kale Beet—A distinct vegetable and much superior to the common beet for greens. If sown at the same time it will be fit for use before it. Later, the plants form broad, flat, beautiful wax like stems to the leaves, which are very delicious cooked as beets, or pickled. We recommend all our customers to try it. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

Lane's Improved Imperial Sugar—This variety is one of the best for the uses which sugar beets are put to in this country. It is not so sweet as the French sugar beets grown especially for sugar making, but the roots are longer and more symmetrical, of fine grain and very sweet, making it good for table use or for cattle feeding.

The following varieties are used for stock feeding. They are easily grown and harvested, keep well through the winter, and give an immense amount of cattle food at a small cost, but need a rich, well prepared soil. Sow in drills thirty inches apart, as early as the ground can be got in condition. Cultivate well when young, and thin out the plants to one foot apart in the row. If these trimmings are carefully handled, and the larger leaves cut off, they can easily be reset to fill vacancies, and will make the largest roots. Care should be taken not to break or bruise the roots any more than necessary in harvesting.

Vilmorin's Improved Imperial Sugar—A medium sized white sugar beet, brought by the most careful selection to the highest perfection, both in the constancy of shape, size and color of the roots and their high sugar content. Greatly esteemed by sugar manufacturers. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

French White Sugar Red Top—This variety is the result of careful selection and culture by one of the most extensive and scientific cultivators in Europe. It unites capacity for a large yield, with an exceedingly rich flesh, making it the best for cattle feeding. We think that for this purpose it is much superior to the larger and coarser mangel wurtzels, and we urge our customers to try it, believing they will find it superior to any field beet they have cultivated. Tops medium size, roots above medium size, long, top shaped, growing slightly above the surface; white, washed with red at top; flesh fine grained and sweet. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

NOTE special wholesale prices to gardeners and others who buy large quantities of seeds, on another page. It will pay you to get your neighbors to club in with you and get benefit of these prices.

MANGEL WURTZEL

Golden Tankard—Tops comparatively small, with yellow stems and mid ribs, neck very small, roots large, ovoid, but filled out at top and bottom so as to approach a cylindrical form. Flesh yellow, zoned with white. A great improvement and worthy of use on every farm. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Red Globe—Similar to Yellow Globe, except in color, which is a light red or pink. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

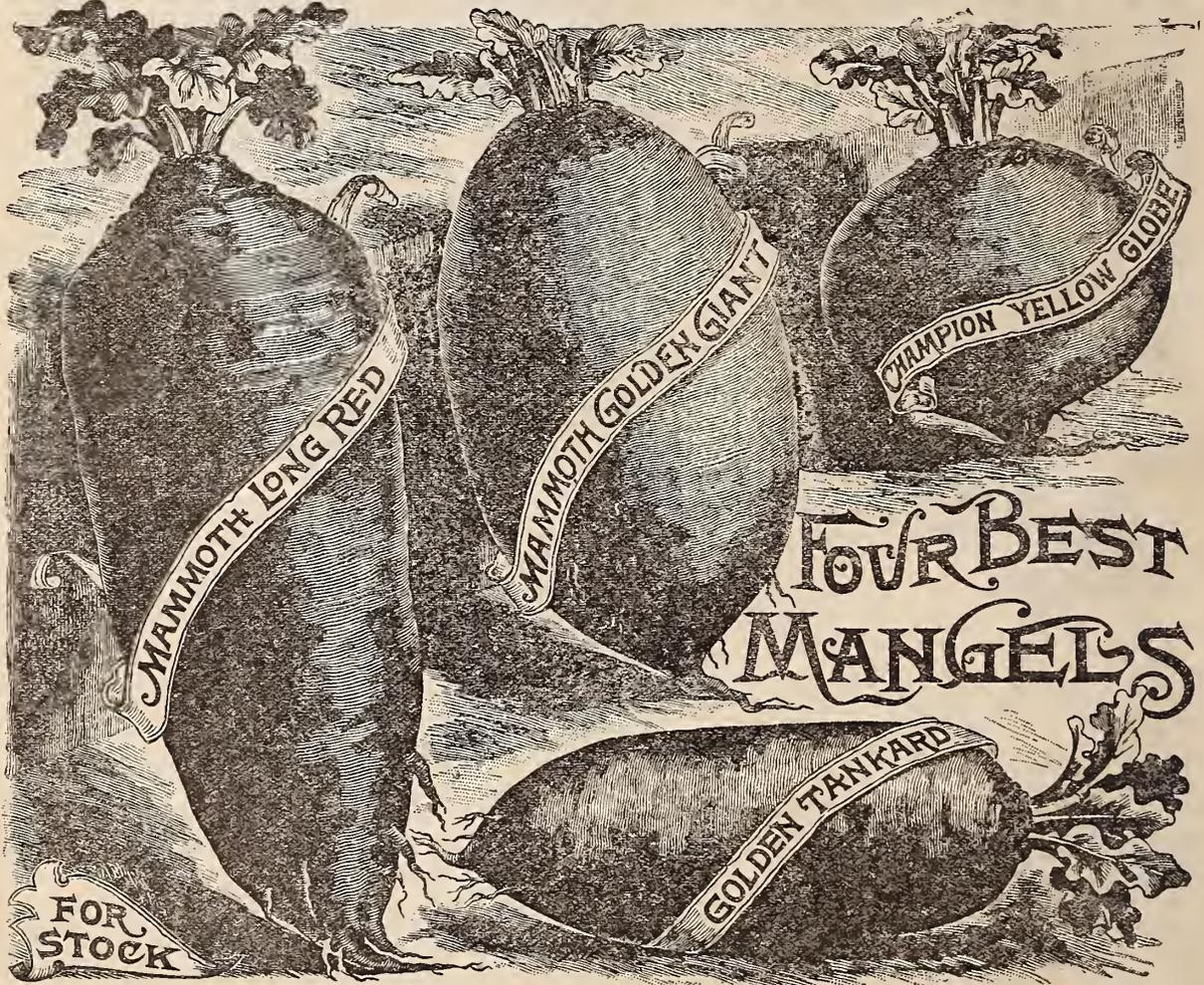
Long Red—A large, long variety, grown for stock feeding. It stands a good deal out of the ground; color light red, flesh white and rose colored. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Improved Mammoth Long Red—An improvement on the old variety. The roots are uniformly straight and well formed and deeper colored than the common sort. Highly recommended for stock feeding. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Norbitan Giant Long Red—Very large, growing well out of the ground. The roots are well formed, straight, smooth and of a fine scarlet color, with comparatively small top and neck. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Orange Globe—This is, we think, one of the best varieties of Mangel Wurzel known for stock feeding. It has exceedingly small tops and few leaves, leaf stalks and blades green; roots medium size, uniformly globe-shaped, having a very small tap and few side roots; color of skin deep orange yellow; flesh white and of excellent quality. The roots grow almost entirely above ground, making them admirably adapted to shallow ground and very easy to harvest. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.

Yellow Leviathan—Roots long, olive shaped, large, growing ever one-half out of the ground; flesh white, sweet and tender; tops bright green, comparatively small; neck small, short. We think this is perhaps the best of the yellow field beets, because its fine flesh never becomes woody, and its roots grow so well out of the ground, that the crop is easily harvested. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 35c.



The following statement from one of the most prominent authorities on agriculture in the northwest speaks volumes in showing the superior quality of MANGEL and other ROOT crops:

"My experience in farming covers a period of over twenty years, during which time I have rarely cultivated less than two to twenty acres of mangel wurtzel and Swedish turnip. As a stock breeder, I have always considered them my most important crops. In North Dakota, where I had the largest herd of thoroughbred cattle, I averaged from twenty to thirty tons of roots to the acre."

Yours, etc., C. J. ALLOWAY.

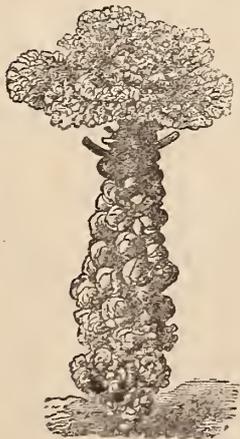
NOTE.—Dr. Alloway was State Veterinarian for North Dakota for three years; for a long time President of the Fine Stock Growers' Association of North Dakota; Lecturer to State Agricultural College at Brookings, S. D.; Director in Grand Forks County Agricultural Society, and one of the largest, most progressive and successful stock breeders in the United States.

BRUSSELS SPROUTS

French, *Chou de Bruxelles*. German, *Sprossen-Kohl*.

CULTURE—They should be treated in all respects like winter cabbage or kale.

The plant grows two or three feet high, and produces from the sides of the stalk numerous little sprouts resembling cabbage heads one or two inches in diameter. The leaves should be broken down in the fall, to give the little cabbages more room to grow. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 50c.



BROCOLI

French, *Chou Brocoli*. German, *Spargel-Kohl*.

CULTURE—The same as that given for cauliflower.

Although originating from a very distinct type, the modern improved sorts of broccoli can scarcely be distinguished from cauliflower; the points of difference being that they are generally taller and the heads more divided. By some considered more delicate than the cauliflower.

Early Purple Cape—This is the best variety for our climate. It produces large heads, of a brownish-purple color, very close and compact, and of excellent flavor. Pkt 5c, oz 40c, $\frac{1}{4}$ lb \$1.25.

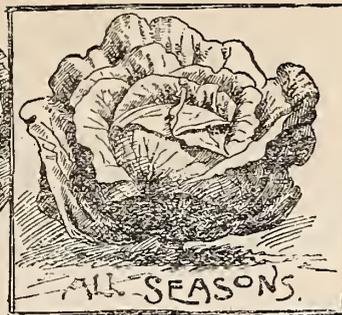
Large White—Same as above, only not quite so hardy. Pkt 5c, oz 40c, $\frac{1}{4}$ lb \$1.25.



EARLY DWARF FLAT DUTCH



MAMMOTH ROCK RED



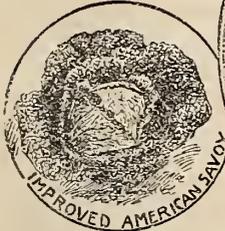
ALL SEASONS



HENDERSON EARLY SUMMER



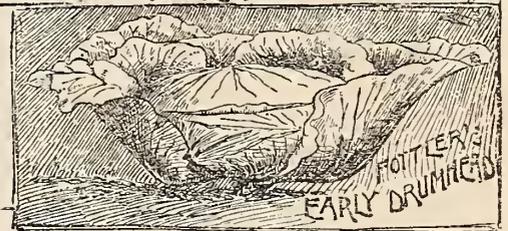
EARLY JERSEY WAKEFIELD



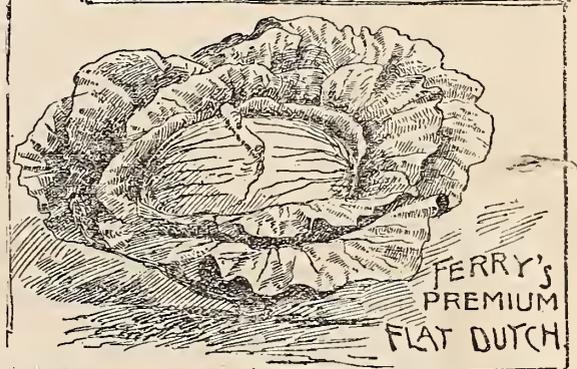
IMPROVED AMERICAN SAVOY



EARLY WINNIGSTADT



FOTHERGILL'S EARLY DRUMHEAD



FERRY'S PREMIUM FLAT DUTCH

CABBAGE

There is no vegetable which is more universally cultivated than this. It is found in the poorest and smallest yard, and it responds so readily to better care that it is also entitled to a place in the finest garden, and merits the attention of the most skillful gardener.

CULTURE.—The requisites for complete success are: *First*, good seed; there is no vegetable where the seed has more influence on the quality of

the product than in this, and gardeners should invariably select the best procurable. *Second*, rich, well prepared ground. *Third*, frequent and thorough cultivation. A heavy, moist and rich loam is most suitable, which should be highly manured and worked deep. Cabbage is so universally grown all over the country that specific directions regarding the time and methods of planting for all localities cannot be given. In general, north of the 40th parallel, the early sorts should be sown very early in hot-beds, hardened off by gradually exposing them to night air, and as early as the ground is in good condition, transplanted, setting eighteen to twenty-four inches apart. South of the 40th parallel sow from the middle of September or according to latitude transplant into cold frames, if necessary to keep through winter, and set in open ground as early as possible in spring.

The late autumn and winter varieties may be sown

from the middle to the last of spring, and transplanted when about six inches high, one and one-half to three feet apart in the row according to size of the variety. Shade and water the late sowings in dry weather to get them up. It is important that the plants should stand thinly in the seed bed, or they will run up weak and slender, and be likely to make long stems.

One of the most successful eastern market gardeners recommends sowing cabbage for family use as follows: At the desired time sow the seed in drills, or in hills, thinly, and after the plants are of sufficient size thin to the proper distance in the row, or to a single plant to the hill, and cultivate as usual. This is a very simple method and in some cases is very successful.

Cabbages should be hoed every week, and the ground stirred as they advance in growth, drawing up a little earth to the plant each time until they begin to head, when they should be thoroughly cultivated and left to mature. Loosening the roots will sometimes retard the bursting of full grown heads.

Of late years many crops of early cabbage have been destroyed by maggots at the roots. The best remedy seems to be to remove the earth from around the stem and apply an emulsion of kerosene made as follows: Add one quart of kerosene oil to two quarts of boiling soft soap which has been thinned to the consistency of cream. Stir the oil thoroughly by churning or other method until it has united with the soap and forms a butter-like substance. Then dilute with five times as much water.

Ashes, slacked lime and coal dust are all recommended as preventatives. These are scattered about the plants, leaving one here and there untreated for the flies to congregate around and deposit their eggs upon, when they should be pulled up and destroyed.

The cabbage worms which destroy the leaves and heads later, may be killed by dusting with pyrethrum powder.

If the disease called club root should get a foothold do not plant the land with any of the *Brassica* family for a year or two. This is usually an effective remedy.

To preserve cabbage during the winter pull them on a dry day, and turn them over on the heads a few hours to drain. Set them out in a cool cellar, or bury them with the heads downward, in long trenches, in a dry situation. In the Middle States, bury the head and part of the stump in the open ground, and place over them a light covering of straw or boards to protect them in severe weather.

A great many of the varieties of Cabbage are simply strains rather than *distinct* sorts and are *practically* the same as some older and better known kind. We do not think there is a single variety offered in this country which we have not seen both in trial and in fields, and we are confident that every good quality can be found in as high degree in some one on the list we offer as any kind in existence.

Early Jersey Wakefield—This is the earliest and hardest heading of the extra early sorts and most gardeners depend upon it for the bulk of their extra early crop. Our stock is grown and selected with the greatest care and there is none better and few as good. Heads conical, very compact and solid, of excellent quality. The thick, stout leaves and compact habit of this sort make it the best of all for wintering over and very early setting. Pkt 5c, oz 20c, ¼ lb 60c, lb \$2.25.

Very Early Etampes—Similar to the well known Jersey Wakefield. The plants are lighter colored but not quite so hardy. The heads are fully as large, not quite so pointed and are of excellent quality. Sold also as "Earliest of all," "Wonderful," etc. Pkt 5c, oz 20c, ¼ lb 60c, lb \$2.25.

Extra Early Express—An extra early sort in which the plants are compact, with round, thick leaves and form an oval head, which is astonishingly large for the size of the plants. The heads are proportionately thicker and less pointed than those of the Jersey Wakefield, and it is only slightly later than that sort. Pkt 5c, oz 20c, ¼ lb 60c, lb. \$2.25.

Early York—An early variety. Heads small, heart shaped, firm and tender; of very erect and dwarf habit, so that they may be grown fifteen or eighteen inches apart. Pkt 5c, oz 10c, ¼ lb 40c, lb \$1.25.

Early Large York—Succeeds the Early York. It is of large size about ten days later, more robust and bears the heat better. Pkt 5c, oz 10c ¼ lb 40c, lb \$1.25.

Hendersons Early Summer—A very early, large heading cabbage. Heads large, flat or slightly conical, and they keep longer without bursting than most of the early sorts. Valuable for both family and Market. Pkt 5c, oz 15c, ¼ lb 45c, lb \$1.50.

All Head Early—A variety in which the plants are more compact, the leaf smoother and thicker and the heads rounder, harder and more uniform in shape than the Early Summer. Certainly a good variety which promises to become very popular. Pkt 5c, oz 15c, ¼ lb 45c, lb \$1.50.

Early Dwarf Flat Dutch—Continued experience confirms our belief that this is the best early round headed sort. Stems short, leaves comparatively few, having short stalks, upright, so that plants can be planted closely; heads large as Early Summer, solid, and stand long without bursting. Our stock should not be confounded with the inferior later stock frequently offered under this name. Pkt 5c, oz 15c, ¼ lb 45c, lb \$1.50.

Early Winnigstadt—One of the best for general use, being a very sure header, and will grow a hard head under circumstances where most sorts would fail, so that those who have failed with other kinds could hope to succeed with this. It seems to suffer less from the cabbage worm than any other sort. Plant very compact, with short, thick leaves. Heads regular, conical, very hard, and keep well both summer and winter. Pkt 5c, oz 15c, ¼ lb 45c, lb \$1.50.

Filderkraut—Similar to, but larger, much more pointed, and heading up with fewer outside leaves than the Winnigstadt, and highly esteemed for making kraut. Good either for first or second crop, and succeeds particularly well on rich prairie soils. Pkt 5c, oz 15c, ¼ lb 45c, lb \$1.50.

CABBAGE—Continued

All Seasons—The sort almost universally grown on Long Island for the New York market. Heads very large, round, often nearly spherical, but usually somewhat flattened; very solid, and of the best quality, keeping as well as the winter sorts. Plant very vigorous and sure heading; leaves large, smooth, with dense bloom. Remarkable for its ability to stand the hot sun and dry weather. Our trial has shown that heads which were fit for market by July 10th, were still salable September 10th, the only change being increased size and density. One of the very best sorts for general cultivation. Inferior strains of this sort are often sold under the name of Vandergaw, etc. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

Fottler's Early Drumhead, or Brunswick Short Stem—In many sections, particularly in the East, this is the only cabbage grown, and it certainly is one of the very best second early sorts in cultivation. Plants have very short stems and large leaves which start from the stem horizontally, but turn upward about the head. Head large, very flat, compact and solid, and of fine quality. We have taken pains to have our stock free from the longer stemmed coarse plants often seen in inferior stocks of this variety. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

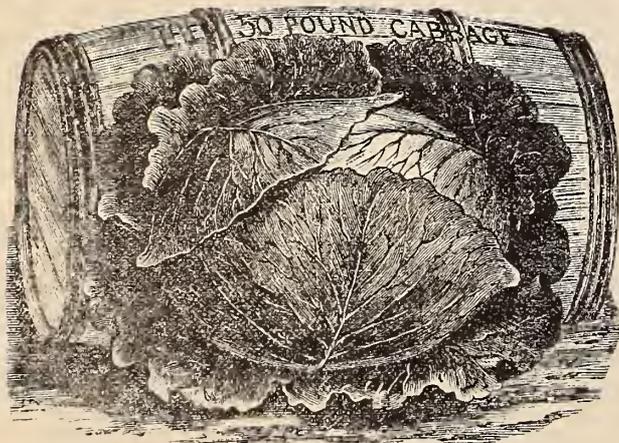
Early Drumhead—Plants compact, with very thick, dark green leaves covered with a dense bloom which protects them in a measure from the worms. Heads flat, very solid and of good quality. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

Stone Mason Marblehead—This is, we think, one of the very best for fall and winter use, being the best in quality of any of the smooth leaved kinds. Plant medium size with only a moderate number of leaves; stem medium length; heads medium size to large, round or slightly flattened, very solid, crisp and tender, and without any coarse or strong flavor. It will certainly give the greatest satisfaction both to the amateur and market gardener and ought to be planted largely by both. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

Surehead—A compact growing general crop cabbage, having medium size large, thick heads and many outer leaves. We assure our customer that our stock is the genuine Surehead. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

Premium Late Flat Dutch—We consider our stock much superior to those usually offered under this name, as we have taken the utmost pains to develop the good qualities which have made the sort so popular, and thus tempt unscrupulous seedsmen to palm off inferior seed under this name. A thousand plants can be depended on to produce one thousand large, oval, solid heads of splendid quality, which will keep in the best condition for a long time. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.

Premium Late Drumhead—We recommend this sort to market gardeners and growers for shipping purposes. In good, rich soil, and with a favorable season, the heads will grow to an enormous size; very compact and solid, and of excellent flavor. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 45c, lb \$1.50.



Marblehead Mammoth Drumhead

Marblehead Mammoth Drumhead—The largest cabbage known, weighing in some instances over fifty pounds. Under good cultivation acres have been grown where the heads would average thirty pounds each. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Mammoth Rock Red—This is by far the best, largest and surest heading red cabbage ever introduced. The plant is large, with numerous spreading leaves. The head is large, round, very solid and of a deep red color. Ninety-eight per cent of the plants will form extra fine heads. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Large Red Drumhead—Excellent for pickling or eating raw. Forms very hard, oblong heads, round at top, of a dark red, or purple color. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

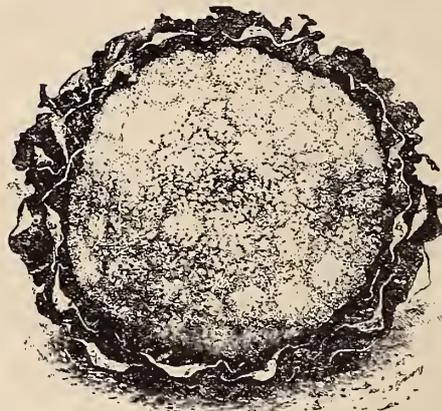
Cauliflower

French, *Chou-fleur*. German, *Blumen-Kohl*.

The cauliflower, although one of the most delicious vegetables, is but little grown except by professional gardeners, by reason of the erroneous notion that it is so difficult to grow, that only skilled gardeners can produce it. We are certain that anyone will be reasonably successful with this most desirable vegetable if they will observe the cultural directions given below.

CULTURE—For spring and early summer crop sow in March or early in April in hot-bed and transplant to cold frame when sufficiently large, and to the open ground as soon as danger of hard freezing is over. The plants will endure a light frost. The soil for cauliflower should be like that for cabbage, but it is better to be made richer than is ordinarily used for that crop. Give the plants thorough culture and keep free from worms with Persian insect powder. For late crop sow at same time as for late cabbage and treat in the same manner. It should be borne in mind that cauliflower *will not* head up well in hot, dry weather, and hence the sowing should be so regulated as to bring it in either in early summer or late fall. Although nine-tenths of the cauliflowers grown in this country are produced without it, frequent and abundant watering is so beneficial that it pays well for the labor it costs. After the heads begin to form draw the leaves over them and pin or tie them together to protect them from the sun and keep them white. They should be cut for use while the "curd" is compact and hard, as they soon become tough and bitter after they open and separate into branches.

Our cauliflower seed is produced by the most experienced growers in Europe, in such localities as are best suited to its proper development, and the greatest care is taken to save seed from nothing but perfectly developed plants. It can therefore be relied upon to give entire satisfaction if properly planted and cared for, and the season is such as to make a crop.



Early Snowball

Early Snowball—More extensively grown than any other variety, both for forcing or wintering over for early crop. It is exceedingly early and hardy and is one of the surest to make a solid, compact head. For these reasons it is growing also more and more in favor for planting for the late summer and fall crop. We have taken great pains to secure the best seed procurable and confidently recommend it as equal to that offered by anyone. Pkt 10c, $\frac{1}{4}$ oz 75c, 1 oz \$2.50, $\frac{1}{4}$ lb \$8.00.

Extra Early Dwarf Erfurt—Our stock is almost as early as Early Snowball and is very desirable for forcing or for planting out doors. Plants compact, with few, narrow, upright leaves, and suited for close planting; forms solid, compact heads even under unfavorable conditions and is therefore one of the most desirable for general use. We think our stock of this is unsurpassed and want to assure our customers that it is as early as any catalogued as "Earliest," or "First Early." Pkt 10c, $\frac{1}{4}$ oz 15c, oz \$2.00 $\frac{1}{4}$ lb \$6.50.

Extra Early Paris—Heads large, white, compact and solid, of excellent flavor, tender and delicious. Leaves large, stalk short. Being so early, it must always be a favorite, especially with market gardeners. Pkt 5c, oz 60c, $\frac{1}{4}$ lb \$1.50.

Early Erfurt—One of the best for general cultivation. Heads large, close, compact and very white. Pkt. 5c, oz 60c, $\frac{1}{4}$ lb \$1.50.

Le Normand's Short Stem—Considered by the French one of the very best sorts. Plant hardy, compact growing, sure heading, and producing many leaves, which protect the close, solid curd, keeping it well blanched. Pkt 5c, oz 60c, $\frac{1}{4}$ lb \$1.50.

Large Algiers—A valuable late sort, sure to head, of the best quality, and very popular with market gardeners elsewhere. Plant large but of upright growth, the leaves protecting the head so that it will endure uninjured a freeze that would ruin other sorts. One of the very best of the late sorts. Pkt 5c, oz 60c, $\frac{1}{4}$ lb \$1.50.

Veitch's Autumn Giant—A distinct and valuable late variety. The heads are very large, extremely white, firm and compact, and being well protected by foliage, remain a long time fit for use. The plants should be started and transplanted early in the season, to insure their full development. Pkt 5c, oz 60c, $\frac{1}{4}$ lb \$1.50.

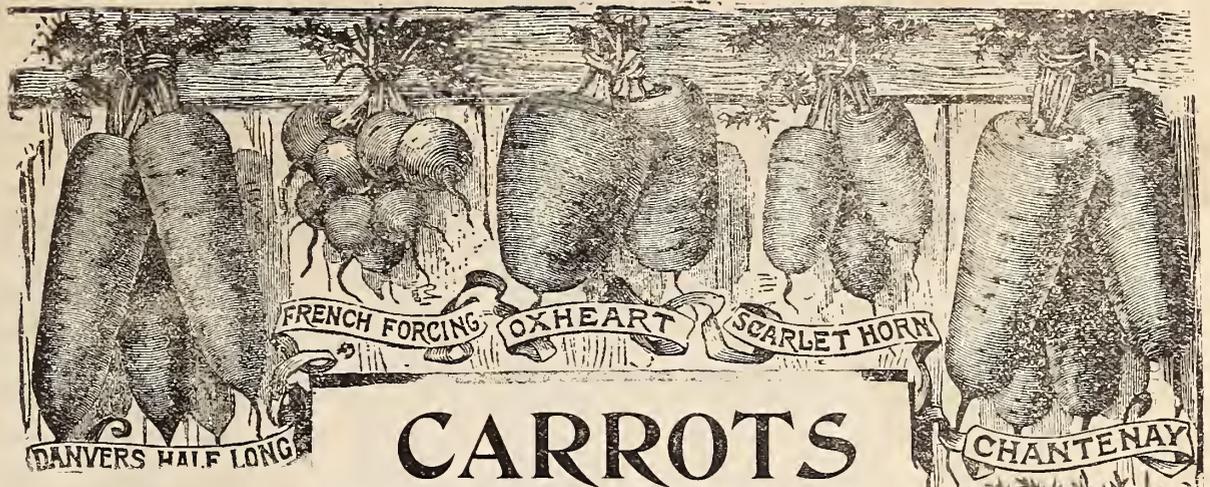
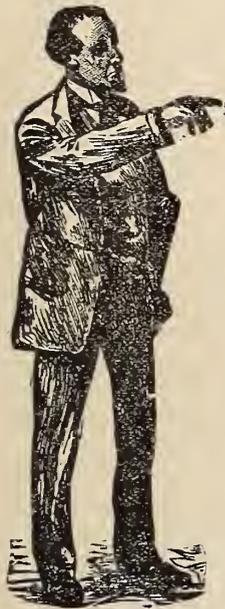
Chicory

French, *Chicoree*. German, *Cigorien*.

Large Rooted or Coffee—The dried and prepared roots of this are used quite extensively as a substitute for and adulterant of coffee. Sow the seed as early in the spring as the ground can be prepared, in a rather light, moderately rich soil, in drills fifteen inches apart for garden and two to two and one-half feet for field culture. When the plants are sufficiently large thin to four to six inches apart in the row. Keep clear of weeds, and in the fall dig the roots, slice them and dry in an apple evaporator or kiln constructed for the purpose. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 25c, lb 75c.

DANVERS CARROT

Danvers—It is grown largely everywhere on account of its great productiveness and adaptability to all classes of soils. Tops medium size, coarsely divided; roots deep orange, large but medium length, tapering uniformly to a blunt point, smooth and handsome; flesh sweet, crisp, tender and of a deep orange color. This variety, although the roots are shorter, produces as large a bulk as the older field sorts, and is more easily harvested. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.



The farmer who does not grow Carrots makes a great mistake. In nutritive qualities they are at the head of all roots. We recommend that those interested in growing roots for stock feeding send to the U. S. Department of Agriculture, Washington, D. C., for a free copy of Bulletin No. 11, giving analyses of American Feeding Stuffs.

The Carrot is one of the most wholesome and nutritious of our garden roots, and deserves to be more extensively used, both for culinary and stock feeding purposes. We urge our readers to give some of the early table sorts a trial. For feeding stock, especially horses and milch cows, the carrot cannot be surpassed, and it should be grown largely by farmers each season for this purpose.

CULTURE—While a sandy loam made rich by manuring the previous year is the best soil for the carrot, any good land if thoroughly and deeply worked will produce satisfactory crops. A clover sod turned under deeply and well enriched with a dressing of rotten manure, is most excellent for the general crop. When it is possible to do so, it is advisable to sow as early in the spring as the ground is fit to work, though good crops may, in this latitude, be grown from sowings as late as June 15. Prepare the ground thoroughly and sow in drills eighteen to twenty-four inches apart, using from one and one-half to three pounds to the acre, according to the distance between rows. Cover one-half to one inch deep and see to it that the soil is well firmed about the seed. As soon as the plants appear, use the cultivator or wheel hoe and do not let the weeds get a start. Thin to three to six inches apart in the row as soon as the plants are large enough. Gather and store for winter use like beets or turnips.

Earliest Short Horn (FOR FORCING)—The earliest variety in cultivation and best suited for forcing. Tops small, finely divided; root dark or reddish-orange, globular, with slender top and grooved at the crown. They grow to about two inches in diameter, but should be used before they are full grown. Pkt 5c, oz 10c, ¼ lb 25c, lb 85c.

Early Scarlet Horn—Excellent for early planting out of doors. Tops small, coarsely divided, roots top-shaped, but tapering abruptly to a small top. Surface dented, skin orange red. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Half Long Scarlet Nantes, Stump Rooted—Tops medium; roots cylindrical, smooth, bright orange; flesh orange, becoming yellow in center, but with no distinct core; of the finest quality. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Improved Long Orange—An improvement on the old Long Orange, obtained by years of careful selection, of the best formed and deepest colored roots. Roots proportionately shorter than the Long Orange, and smoother, but so uniform and true that the bulk of the crop will be greater. The most popular of the older sorts for farm use on mellow soils. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Improved Short White—This distinct variety is, we think, destined to take first rank as a field carrot, owing to its enormous productiveness and its growing well out of the ground, making it comparatively easy to harvest. Roots one-half long, smooth, very heavy at the shoulder, but taper regularly to the point; color light green above ground, white below; flesh rich, white, solid and crisp, and of excellent flavor. This variety is a real acquisition as a heavy yielding, easily harvested, white carrot, and is the best of this class. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Large White Belgian—Grows one-third out of the ground. Root pure white, green above ground, with small top. Flesh rather coarse, but the roots on light, rich ground grow to a large size, and are extensively grown for stock feeding. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Early Half Long Scarlet, Stump Rooted—Excellent for early market, or for field culture. Of medium size, flesh bright scarlet, brittle and of fine flavor. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Chantenay—Tops medium size; necks small; roots tapering slightly, but uniformly stump rooted and smooth; color deep orange-red; flesh very crisp and tender. While this is a medium early sort, it furnishes roots of usable size as early as any, is a heavy cropper and is undoubtedly one of the best for both the market and private gardener while its great productiveness makes it very desirable as a field sort. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Guerande, or Ox Heart—Tops small for the size of the root, specimens of which have been grown which were over seven inches across. They are broad, top-shaped, the diameter often exceeding the length and terminate abruptly in a small tap root, and by reason of their shape are very

easily dug. Flesh bright orange, fine-grained and sweet. This is a desirable variety on soils too hard and stiff for the longer growing sorts, as it is not over five or six inches long. When young, excellent for table use, and when mature equally good for stock. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Chervil

French, *Cerfeuil*. German, *Gartenkerbel*.

A hardy annual, much used in salads and for flavoring. The curled variety is quite as useful for garnishing as Parsley.

CULTURE—Sow in early spring in rich, well prepared soil, and when plants are well established, transplant to about one foot apart.

Curled—Greatly superior to the old plain variety, having fully as fine perfume and flavor, being earlier and more handsome. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Collards

French, *Chou*. German, *Blatter-Kohl*.

A variety of cabbage known in different sections as "Cole" "Colewort" It is extensively used in the South for "greens," where it continues in luxuriant growth all winter.

Georgia, Southern or Creole—This is the variety so extensively used in the South, where it furnishes an abundance of food for both man and beast. Forms a large, loose, open head, or a mass of leaves on a tall stem. Freezing does not injure, but rather improves their quality. Sow thick in drills in rich ground, transplanting when four inches high, or sow in drills where the plants are to remain and thin to two or three feet apart in the row when the proper size. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.

CELERY

French, *Celeri*. German, *Sellerie*.

Celery has come so generally into use that almost every garden has a bed devoted to its growth, and if the soil is rich and the plants well cared for the celery will be one of the most prized products of the garden.

CULTURE—Sow the seed (which is slow to germinate) in shallow boxes or in a finely prepared seed bed out of doors, in straight rows, so that the small plants may be kept free from weeds.

See to it that the seed bed is kept moist, almost wet, until the seeds germinate, as plenty of moisture is essential to get a satisfactory growth. When about two inches high, thin out and transplant so that they may stand three inches apart, and when the plants are four inches high, cut off the tops, which will cause them to grow stocky. The crop is usually made to succeed some earlier crop, but in order to grow good celery the soil must be made as rich as possible; the essentials to success being very rich soil and plenty of water. If good plants are used they may be set out as late as the middle of August, but the best results are usually obtained from setting about the middle of June or the first of July. The most desirable time will depend upon local climate, and is that which will bring the plants to maturity during cool, moist weather. In setting, prepare broad, shallow trenches about six inches deep and four feet apart, in which the plants should be set six inches apart, cutting off the outer leaves and *pressing the soil firmly about the roots*. When the plants are nearly full grown they should be "hauled," which is done by one man gathering the leaves together while a second draws the earth about the plant to one-third its height, taking care that none of the earth falls between the leaves, as it would be likely to cause them to rust or rot. After a few days draw more earth about them and repeat the process every few days until only the tops of the leaves are visible, or the leaves may be pressed together by two wide boards held firmly a few inches apart by cross ties and stakes, when in a few days more it will be fit for use. Care should be taken that the plants are not disturbed while they or the ground are wet, as it would be sure to injure them. A part of the crop may be simply "hauled," and then at the approach of severe freezing weather taken up and set out compactly in a dark cellar or an unused cold frame which can be kept just above the freezing point, and it will then gradually blanch so that it may be used throughout the winter. Should the plants begin to wilt, water the roots, without wetting the stalks or leaves, and they will revive again.

Golden Yellow Large Solid, or Golden Self Blanching—This is beyond doubt the best celery for early market use. Plants of a yellowish-green color when young, but as they mature the inner stems and leaves turn a beautiful golden yellow, which adds much to their attractiveness and makes the work of blanching much easier. The handsome color, crispness, tenderness, freedom from stringiness and fine nutty flavor of this variety make it only necessary to be tried in order to establish it as the standard of excellence as an early sort. Pkt 5c, oz 30c, ¼ lb \$1.00, 1b \$3.50.

White Plume—While we are fully aware that this variety has great merit as an early market sort, being as early as any, requiring no more labor to blanch it than Golden Yellow Large Solid, and being very attractive when fit for use, yet we do not think that it compares favorably with the Golden Yellow either in flavor or solidity, or that it will stay in condition to use as long after it is earthed up. Plants light yellowish-green with tips of leaves almost white. As they mature the inner stems and leaves turn nearly white and require to be earthed up but a short time until they are in condition for use. Where a fine appearing celery at a minimum amount of labor is the object, this variety will give entire satisfaction. An *Improved White Plume* is being offered, but careful comparison of it with our stock failed to show that it is equal to that we offer. Pkt 5c, oz 20c, ¼ lb 60c, 1b \$2.00.

Golden Heart, or Golden Dwarf—A distinct variety of sturdy dwarf habit. It is solid, an excellent keeper and of fine nutty flavor. When blanched, the heart, which is large and full, is of a light yellow, making this an exceedingly showy and desirable variety for both market and private use. Pkt 5c, oz 15c, ¼ lb 40c, 1b \$1.50.

Dwarf White Solid—Dwarf, white, stiff, close habit; solid, crisp and of fair quality. Said to keep in good condition later in the season than any other variety. This variety is also sold as *Large Ribbed Kalamazoo* and *Kalamazoo*. Pkt 5c, oz 15c, ¼ lb 40c, 1b \$1.50.

Perfection Heartwell—The best flavored, most crisp and tender of the white varieties. The plants are a little taller than the Crawford's Half Dwarf and a little later in maturing. The stalks are medium size, round, very solid, crisp and tender and of exceedingly fine and nutty flavor. Pkt 5c, oz 15c, ¼ lb 40c, 1b \$1.50.



Golden Yellow Large Solid, or Golden Self Blanching

Crawford's Half Dwarf—When bleached is of rather yellowish white color, and is entirely solid, possessing the nutty flavor peculiar to the dwarf kinds, while it has much more vigor of growth, surpassing most of the large growing sorts in weight of bunch. Pkt 5c, oz 15c, ¼ lb 40c, 1b \$1.50.

Giant Pascal—This is a green leaved variety developed from the Golden Yellow Large Solid and has no superior for fall and winter use. It blanches very quickly after earthing up, to a beautiful yellowish-white color, is very solid and crisp and of a nutty flavor, unequaled by any other sort. The stalks grow broad and thick, a single plant making a large bunch. With rich soil and high culture this variety will give the best of satisfaction. Pkt 5c, oz 20c, ¼ lb 60c, 1b \$1.75.

Incomparable Dwarf Crimson—The red varieties are yearly becoming more popular, because they keep better through the winter, and are generally of superior flavor. This is a dwarf sort, of deep, rich color, very crisp, and of the highest flavor. We have found none of the so-called new sorts of red celery, such as New Rose, etc., that were equal to our strain of this most excellent variety. Pkt 5c, oz 20c, ¼ lb 60c, 1b \$1.75.

CELERIAC. OR TURNIP-ROOTED CELERY.

French, *Celeri-rave*. German, *Knoll-Sellerie*

CULTURE—Sow the seed at the same season and give the same treatment as common celery. Transplant the young plants to moist, rich soil in rows two feet apart and six inches apart in the row. Give thorough culture. As the roots are the edible portion of this vegetable it is not necessary to earth up or "handle" it. After the roots have attained a diameter of two inches or over they will be fit for use. To keep through winter pack in damp earth or sand and put in the cellar, or leave out of doors, covering with earth and straw, like beets or carrots.

Turnip-Rooted—The root of this variety is turnip-shaped and tender, having a sweeter taste and stronger flavor than other varieties. It is used principally for seasoning meats and soups. Pkt 5c, oz 10c, ¼ lb 30c, 1b \$1.00.

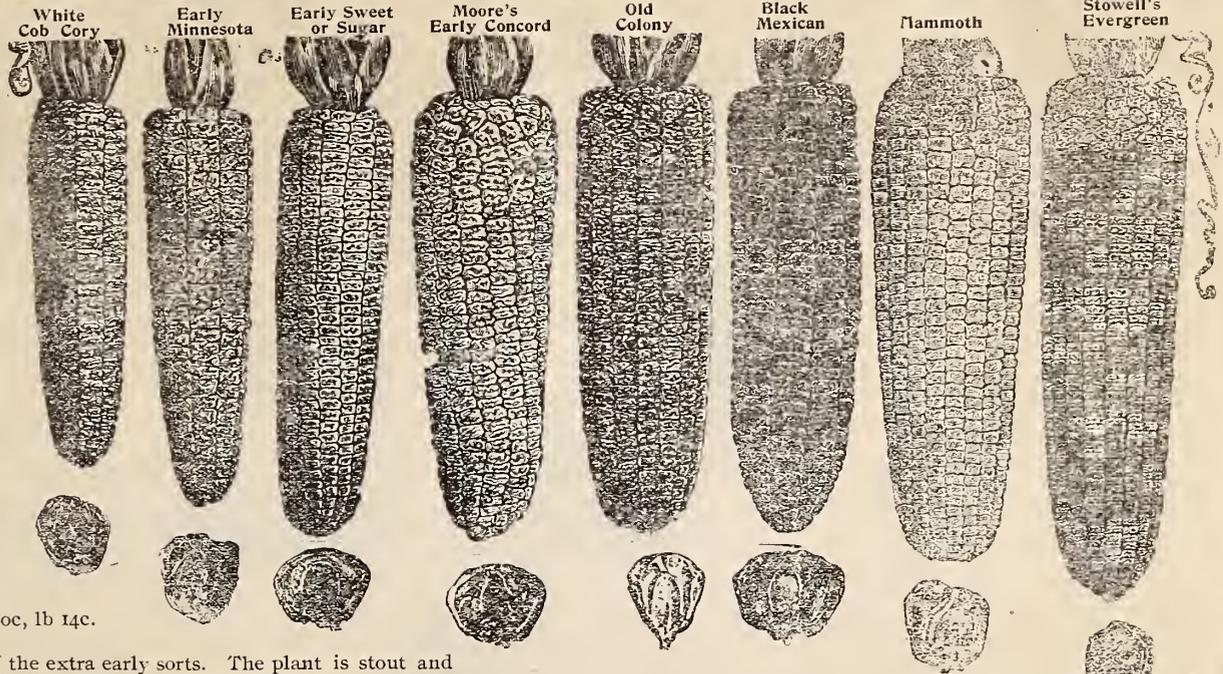
Large Smooth Prague—An improved form of turnip-rooted celery, producing large and smooth roots, which are almost round and with very few side roots. Plants vigorous, with large, deep green foliage. Pkt 5c, oz 15c, ¼ lb 40c, 1b \$1.50.



Dwarf White Solid Perfection Heartwell Giant Pascal Dwarf Crimson White Plume

SWEET CORN

Northern Grown
Acclimated



French, *Mais*. German, *Mais*
CULTURE—A rich, warm alluvial soil is best, and immediately before planting, this should be deeply and thoroughly worked. Give frequent and thorough but shallow cultivation until the tassels appear.

Sweet or Sugar

White Cob Cory—We consider this the best extra early sweet corn. The ears are fully as large and well filled as Cory, and just as early, and have the great advantage of a white cob, making this variety the best extra early market corn. We hope all our friends will plant largely of this for early crop, as we feel sure that it cannot fail to give entire satisfaction. Pkt 10c, lb 14c.

Cory—The largest of the extra early sorts. The plant is stout and vigorous, but short, and it will mature a full crop earlier than any of the much lauded new strains. Ears eight-rowed, with red cob and very large light pink grains. All the red cobbled corn should be cooked quickly by dropping the ears into boiling water to which a little salt has been added, for if simmered over a slow fire, or allowed to stand in the water after cooking, the red cob will discolor the kernels. Pkt 10c, lb 14c.

Crosby's Early—A most excellent variety, remarkably early and of the best flavor. Ears of medium size, twelve or more rowed, grain very thick and sweet. This is the sort so largely grown in Maine for canning, and it is the use of this variety rather than any peculiarity of soil that has given Maine Sweet Corn its reputation for quality. Pkt 10c, lb 14c.

Early Minnesota—This old and deservedly popular variety is one of the best early sorts for the market and the private garden. Stalks short and not suckering, bearing one or two ears well covered with husks; ears long, eight rowed; kernels very broad, sweet and tender, not shrinking much in drying. By careful selection we have developed a stock of this standard variety which is remarkably uniform, and in which all the good qualities which have made it so popular are intensified. Pkt 10c, lb 14c.

Stowell's Evergreen—The standard main crop variety, and if planted at the same time with earlier kinds, will keep the table supplied until October. It is hardy and productive, very tender and sugary, remaining a long time in condition suitable for boiling. Our stock has been carefully grown and selected to avoid the tendency to a shorter grain and deterioration in the Evergreen character of this best known of all late sorts. This and Mammoth are standard late varieties in the south. Pkt 10c, lb 14c.

Mammoth—This variety produces the largest ears of any sort with which we are acquainted, a single ear sometimes weighing two or three pounds. It is of excellent quality, sweet, tender and delicious, and its only fault is the immense size of the ear. Pkt 10c, lb 14c.

Early Sweet or Sugar—Ears long, slender, eight rowed. Grain very white, tender and sugary; plant productive, hardy and quite early. An old but excellent table sort. Our stock is distinct and true, and not such a mixture of all sorts of early sweet or sugar corn as is often offered under this name. Pkt 10c, lb 14c.

Moore's Early Concord—Produces its large, handsome fourteen rowed ears very low on the stalk, and comes into use after Perry's Hybrid. The quality is faultless, being much like the Crosby, and it is an excellent sort to follow that variety either for the canning factory, or the garden, and it is valuable as an intermediate variety. Pkt 10c, lb 14c.

Black Mexican—Although the ripe grain is black or bluish-black, the corn, when in condition for the table, cooks remarkably white, and is surpassed by none in tenderness. This, by many, is considered the most desirable for family use of the second early sorts. It does especially well for second early in the South. Pkt 10c, lb 14c.

Old Colony—Originated near Plymouth, Mass., about fifty years ago; was lost sight of for a while; revived and sold under various names, such as

If Peas, Beans or Corn are wanted by mail, add 8 cents per pound to cover postage

Landreth's Sugar, etc. We consider it a more desirable sort than the Country Gentleman or the Ne Plus Ultra in that the skin is not so tough, and certainly is all that can be desired in quality. Stalks about six feet high, usually bearing two large, sixteen to twenty rowed ears; grain very deep and the sweetest and best of the late varieties. It is fit to use a few days earlier than Evergreen; cannot be excelled as a market sort and is of the best for canners. Pkt 10c, lb 14c.

Field Corn

Early Red Blazed—This flint variety is not only early, but will endure uninjured a degree of cold and wet that would be fatal to other sorts. Stalks medium high, without suckers, dark green with red or bronze markings. Leaves broad, green at base, but bronze at top, particularly while the plant is young. Ears long, eight rowed, well filled, small at base. Grain flinty and of fine quality, bright yellow at the tips. It is also known as *Smut Nose*. Pkt 10c, lb 10c.

Early Golden Dent, or Pride of the North—A very early Dent variety, ripening with the flint sort and can be grown as far north as any other variety of Dent corn. Stalks small with broad leaves. Ears short, twelve to sixteen rowed, well filled. Grain long, yellow, making an extra quality of meal. Pkt 10c, lb 10c.

Pop-Corn

Rice, for Parching—A very handsome variety. Ears short; kernels long, pointed, and resemble rice; collar white; very prolific. Probably no variety of pop-corn is superior to this for parching. Pkt 10c, lb 10c.

Corn Salad, Fetticus, or Lamb's Lettuce

French, *Mache*, *Salade, de ble*. German, *Ackersalat*, *Lammersalat*. This small salad is used during the winter and spring months as a substitute for lettuce, and is also cooked and used as spinach. In warm weather the plant will mature in from four to six weeks. CULTURE.—Sow the seed in shallow drills about one foot apart, during August and September. If the soil is dry it should be firmly pressed over the seed in order to procure prompt germination. On the approach of severely cold weather, cover with straw or coarse litter. The plants will also do well if the seed is sown very early in the spring, and like most salad plants, are greatly improved if grown on very rich soil; indeed the ground can scarcely be made too rich for them. Pkt 5c, oz 10c, 1/4 lb 20c, lb 70c.

Corn Broom

There are many farmers who might make this a very profitable crop, as an acre will give about five hundred weight of broom and nearly forty bushels of seed, worth about as much as oats for feed. CULTURE.—It should be planted a few days later than corn, but requires similar soil and culture. It is frequently planted in drills three and a half feet apart, leaving the plants six inches apart. Improved Evergreen—Grows to a height of seven to nine feet; early and produces a very fine brush of good length and of green color. Pkt 5c, oz 10c, lb 25c.

Cucumber...

French, *Concombre*. German, *Gurken*.

This is one of the vegetables which can be grown to perfection by anyone who can control a few square yards of soil which is fully exposed to the sun, and the fruit is so much better when gathered fresh from the vines than it is when obtained in the market, that every family should be supplied from its own yard.

CULTURE.—The soil for cucumbers should be thoroughly enriched with well-rotted manure in order to obtain the largest yield, but any rich garden soil will grow good cucumbers. Plant the seed in rows six feet apart, and four to six feet apart in the row, dropping fifteen to twenty seeds in a hill. After the plants begin to crowd and the striped beetles are pretty well gone, thin to three plants to the hill. Give frequent, but shallow cultivation, until the plants make runners so long that this is impracticable. In field culture, plow furrows four feet apart across the field, and similar ones, but omitting every fourth furrow, at right angles to the first: this will form paths for the distribution of manure and the gathering of the fruit. At each intersection drop a shovelful or more of well rotted manure, which should be well mixed with soil, so as to form a low, flat hill.

As soon as the plants are up they will be liable to attack by the striped cucumber beetle. These may be kept off by frequent dusting with air-slacked lime, soot, or sifted ashes diluted with fine road earth; care should be taken not to use too much, for if too strong, any of the above materials will kill the vines; but the best protection against injury is a vigorous and rapid growth of the young plants.

In gathering, pick all the fruit before it begins to ripen, as the vines will cease setting fruit as soon as any seed commences to mature.

In gathering the pickles, cut the stem, instead of pulling the fruit off, and be careful not to mar the fruit in any way, for if the skin is broken the pickles will not keep so well.

Early Russian—Earliest and hardiest. Vines vigorous and productive. Fruit three to four inches long, thick, oval, pointed at each end. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Early Cluster—Vines vigorous, producing the bulk of the crop near the root and in clusters. Fruit short, holding full size to each end, dark green, but paler at blossom end. Good for table use, but not adapted to pickling. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Arlington—A selection from the White Spine, being more pointed at each end. The young fruits are unusually tender, and are of a very dark green color, so that the variety is considered by many to be the best for small pickles. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Boston Pickling, or Green Prolific—A distinct variety, very popular for pickles. Fruit very smooth and symmetrical, cylindrical, but a little pointed at each end, bright green and a great producer. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Cress

French, *Cresson*. German, *Kresse*.

CULTURE.—The seed should be sown and lightly covered, in gravelly, mucky lands, along the borders of small, rapid streams, and the plants will need no subsequent culture as under favorable conditions they increase very rapidly by self-sown seed and extension of the roots.

True Water—This is quite distinct from the last, and only thrives when its roots and stems are submerged in water. It is one of the most delicious

Early Short Green, or Early Frame—An excellent sort both for table use and for pickling. Plants very vigorous and productive. Fruit straight, handsome, smaller at each end, bright green, lighter at the blossom end, with crisp, tender flesh, and makes excellent pickles. Our stock is very superior. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Albino—Fruit large, clear white, very crisp, tender and of excellent flavor. Splendid for the home garden, and decidedly the best of the white-skinned sorts. Pkt 5c, oz 10c, ¼ lb 25c, lb 80c.

Bismarck—A cross between Long Green and White Spine, producing dark colored slender pickles like the former, and becoming like the latter at maturity. Fruit long, cylindrical, very constant in form and color; flesh crisp and tender; excellent either for pickles or slicing. Those who want a cucumber longer than White Spine, but with its other characteristics, will find in this variety all they desire. It is also one of the best on the list for slicing. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Improved Long Green—Produced by selection from the Long Green. Vines vigorous and productive, forming fruit fit for the table nearly as early as the shorter sorts; fruit about twelve inches long, firm and crisp. The young fruit makes one of the best of pickles, and when ripe is the best of any for sweet pickles. We offer a carefully selected strain, uniformly long and of good form, with the large warts and spines well distributed over the surface instead of being clustered at one end, as in inferior stocks. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

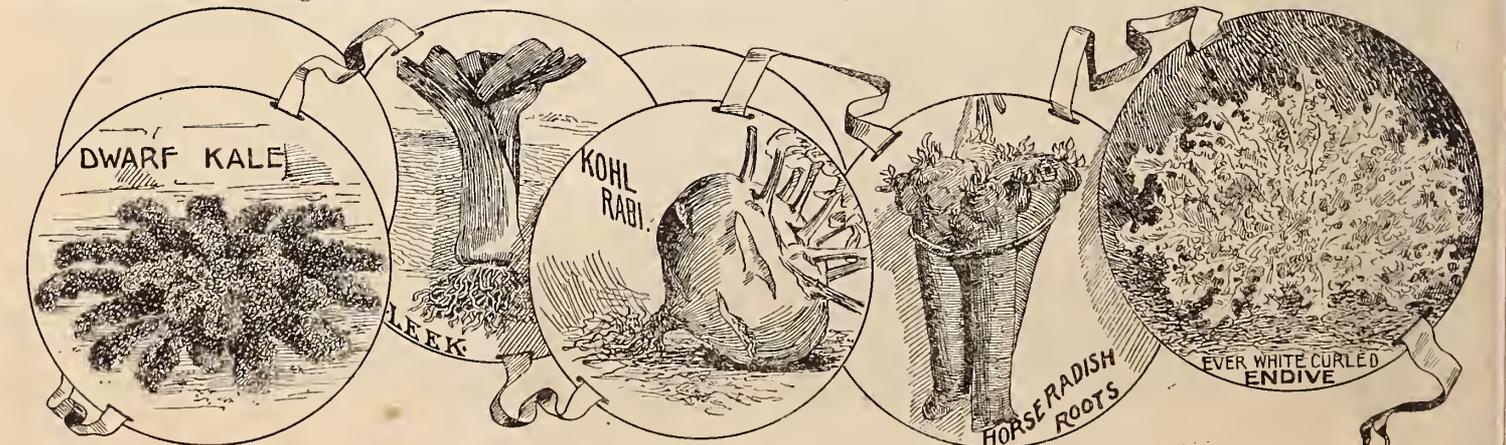
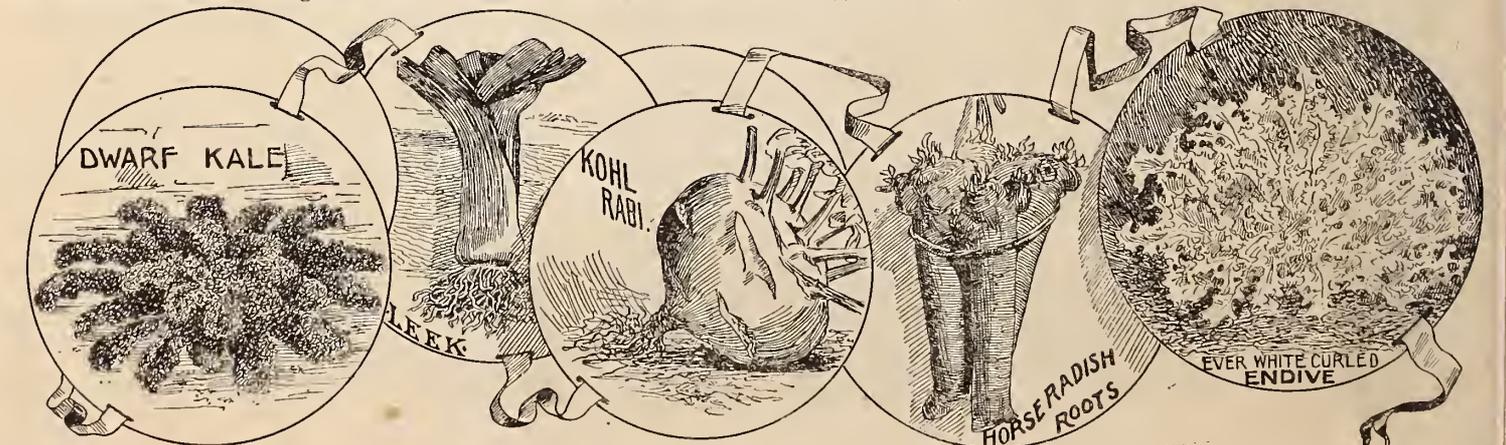
Gherkin, for Pickling—A very small, oval, prickly variety, quite distinct from all others. It is grown exclusively for pickling; is the smallest of all the varieties and should always be picked when young and tender. The seed is slow to germinate, requiring usually from two to three weeks. Pkt 5c, oz 10c, ¼ lb 35c, lb \$1.00.

Early White Spine—One of the best sorts for table use. Vines vigorous, fruiting early and abundantly; fruit uniformly straight and handsome; light green with a few white spines; flesh tender and of excellent flavor. In this country this variety is used more, perhaps, than any other for forcing under glass. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

of small salads and should be planted wherever a suitable place can be found. Pkt 5c, oz 30c, ¼ lb \$1.00.

CULTURE OF THE CURLED VARIETIES—The seed should be sown in drills about eighteen inches apart, on very rich ground, and the plants well cultivated. It may be planted very early, but repeated sowings are necessary to secure a succession. Keep off insects by dusting with Pyrethrum Powder.

Curled, or Pepper Grass—This small salad is much used with lettuce, to which its warm, pungent taste makes a most agreeable addition. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.



Egg Plant

French, *Aubergine*. German, *Eierpflanze*.

The Egg Plant, when well grown and properly cooked, is a delicious vegetable, and it should find a place in every garden.

CULTURE.—The seed germinates slowly, and should be started in strong heat, for in this as in all sub-tropical plants it is of importance to secure a rapid and continuous growth from the first, the plants never recovering from a check received when young. When the plants have formed two rough leaves, transplant to three or four inches apart. Keep the bed closed and very warm, shading from the direct rays of the sun and giving abundance of water until the ground is warm and all danger, not only from frost, but from cold nights, is past; then harden off the plant by gradual exposure to the sun and air, and decrease the supply of water, then *carefully* transplant into the open ground, setting the plants two and a half feet apart. If needed, shade the young plants and protect them from the potato bug, which is very fond of them and will often destroy them. Some seasons Egg Plants will fail to set fruit, or will not begin bearing until too late to mature, no matter how faithfully they may have been cared for. This is especially liable to happen if the summer is cool or rather moist. We know of no remedy for this. Pinching off the ends of the branches after the plants begin to bloom, and not letting more than two or three fruits set will often effect something, and is a good practice.

Early Long Purple—This is one of the earliest and most productive varieties; fruit long, dark, rich, purple, and of fine quality. Pkt 5c, oz 20c, ¼ lb 60c, lb \$2.00.

Black Pekin—Nearly as early as the last, and nearly as large as the later sorts. Very prolific and desirable for market gardeners' use. Fruit nearly round; skin smooth, black and glossy; flesh white, fine grained and delicate. Pkt 5c, oz 30c, ¼ lb \$1.00.

Improved Large Purple (SPINELESS)—This variety has about superseded all others both for market and private use. The large size and high quality of its fruit and its extreme productiveness make it the most profitable to grow. Plants large, spreading; foliage light green; fruit very large, oval, or short pear shaped; color dark purple. Plants ripen usually two to six large fruits. Bear in mind that our stock is *spineless*, which is a great advantage in handling. Pkt 5c, oz 30c, ¼ lb \$1.00.

Endive

French, *Chicoree*. German, *Endivien*.

CULTURE.—Endive may be grown at any season of the year, but is more generally used late in the fall. Sow the seed during June or July, in drills fourteen inches apart, and when well established thin the plants to one foot apart. When nearly full grown, tie the outer leaves together over the center in order to blanch the heart of the plant. By covering every few days a succession may be kept up.

Small Green Curled—Is the hardiest variety, with beautifully curled, dark green leaves, which blanch white, and are very crisp and tender. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Large Green Curled—A larger growing variety which seems to do particularly well in this country; growing well blanched centers without the tendency to rot, which many kinds show in bad weather. Outer leaves, bright, deep green, blanching easily to clear white. Pkt 5c, oz 20c, ¼ lb 60c, lb \$1.75.

Moss Curled—A variety growing considerably denser and having the leaves much finer cut than the Green Curled; in fact, the whole plant is more compact. When well blanched it makes a very attractive appearance. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Ever White Curled—By far the most beautiful variety. Plant moderately dense with divided leaves, which are coarser and less tender than those of the Green Curled; but even the outer leaves are very light colored, frequently white, so that the plant is very attractive and always brings the highest price on the market. Pkt 5c, oz 20c, ¼ lb 50c, lb \$1.50.

Garlic

A bulbous rooted plant, with a strong, penetrating odor, but much esteemed by some for flavoring soups, stews, etc. We frequently receive orders for *garlic seed*, but we can only supply bulbs.

CULTURE.—Prepare the ground the same as for onions, and plant the bulbs in drills eight inches apart, and four inches apart in the rows and cover two inches deep. When the leaves turn yellow, take up the bulbs and dry in the shade, and lay them up in a dry loft as you would onions. Bulb ¼ lb 15c, lb 50c.

Horse Radish

Horse Radish produces no seed but is grown from pieces of the roots.
CULTURE.—Mark off rows two and one half feet apart in rich, moist, well prepared ground and set the pieces of roots eighteen inches apart in the rows, two to three inches below the surface, the small end down. Cultivate thoroughly until the tops cover the ground, when their shade will keep down the weeds. Small Roots 10c each or 40c per doz postpaid by Express \$1.50 per 100.

Kale

Borecole. Kale, or German Greens are general terms applied to those classes of cabbage which do not form heads, but are used in their open growth. Some of the varieties are the most tender and delicate of any of the cabbage tribe. They are hardy and are improved rather than injured by the frost.

CULTURE.—As far north as new York they may be sown in September and treated like Spinage, although in the south they will live and grow throughout the winter without protection, or they may be planted and treated like winter cabbage, and will continue growing till very late. If cut when frozen, thaw out in cold water before boiling. The young shoots which start up in the spring from the old stumps are very tender and make excellent greens.

Tall Green Curled Scotch—This is very hardy, and improved by a moderate frost. About thirty inches tall, with an abundance of dark green leaves, which are densely curled and cut, forming a very beautiful plant. It stands the winters in the Middle States without any protection. Pkt 5c, oz 10c, ¼ lb 20c, lb 75c.

Dwarf Curled Scotch, or German Greens—Plant low and compact, but with large leaves curled, cut and crimped until the whole plant seems like a bunch of moss. It is well worth cultivation simply for its beauty. One of the best sorts for use, and when well grown and cooked is one of the most palatable of vegetables. Pkt 5c, oz 10c, ¼ lb 20c, lb 75c.

Half Dwarf Moss Curled—A variety intermediate between the tall and dwarf, having much of the hardness of the tall and the beauty of the dwarf sorts. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

German Dwarf Purple—Similar to the Dwarf Curled Scotch, but of a rich purple color. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Kohl Rabi

The Kohl Rabi is a vegetable intermediate between the cabbage and the turnip, and combines the flavor of both. The edible part is a turnip shaped bulb formed by the swelling of the stem. When used for the table this should be cut when quite small, as it is then very tender and delicate, but if allowed to reach its full size it becomes tough and stringy.

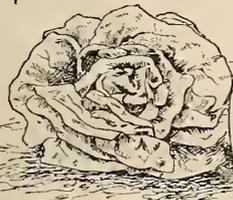
CULTURE.—Sow in light, rich soil, as early as possible, in drills sixteen inches apart, and when well established, thin to six inches apart in the row. One or two plantings at intervals of ten days will give a succession until hot weather, when they fail to grow well; but plantings may be made the latter part of July for fall use.

Early White Vienna—Very early, small, handsome, white bulb. Best early variety for table. Pkt 5c, oz 20c, ¼ lb 60c, lb \$1.75.

Early Purple Vienna—Nearly identical with the last, except in color, which is a bright purple, with the leaf stems tinged with purple. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Large Green—Hardy, quite late, and used for feeding stock. Bulbs large, weighing eight to ten pounds, whitish-green in color, leaves large and numerous. Pkt 5c, oz 10c, ¼ lb 40c, lb \$1.00.

BUTTERCUP



HANSON.



SIMPSON'S EARLY PRIZE HEAD



DEACON.



Webfoot Fertilizers on your vegetable garden saves many weeds and makes crops larger, more tender and mature quicker.

FERRY EARLY PRIZE HEAD.



LETTUCE...

French, *Laitue*. German, *Lattich-Salat*. There is no vegetable which is more universally used than this, and yet few people know how inviting and appetizing it is when brought to the table fresh and unwilted, a condition in which it is rarely, if ever, found in our markets, and which can only be secured by growing the plants in one's own garden. So we earnestly urge all of our readers who can possibly do so, to grow their own lettuce.

CULTURE.—Lettuce should grow rapidly, and to attain this end it should be sown in a rich, thoroughly prepared soil. For early crop sow under glass from November to February and thin out as necessary to prevent crowding. Keep at a moderate heat, and give all the air and light possible. For early out door culture start plants in the fall, protecting them as needed with frames or coarse cotton, or start under glass from January till March and harden off before setting in the open ground, which should be done as soon as the ground and weather will permit. For general crop sow out doors as early in spring as ground can be worked, in drills eighteen inches apart and thin the young plants to four inches apart in the row. As the plants begin to crowd, thin out and use as required. In this way a much longer succession of cuttings may be had from the same ground. Sow at intervals of from two to three weeks throughout the summer for a continuous crop. In this as in every other garden crop, thorough cultivation is essential.

Grand Rapids (SEED BLACK)—As a lettuce for greenhouse forcing this variety undoubtedly stands at the head of the list. Leaves medium size of light, yellowish-green color

LETTUCE—Continued

much crimped and frilled, thin, but of very upright growth; forms a fair size but loose cluster of leaves which cannot be properly called a head, crisp, tender and of good quality. Owing to its upright habit it may be planted very closely. It is of extremely rapid growth; very little liable to rot; will stand without spoiling, a week to ten days after it is fit to cut, and retains its freshness a long time after cutting. It will stand shipping a longer distance than any other variety of this class. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Early Curled Silesia (SEED WHITE)—An early erect growing, loose heading variety, which may be used very young, when it is exceedingly sweet and well flavored. Color light green; leaves much frilled and savoyed. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Early Tennis Ball (SEED BLACK)—A first class head lettuce, and one of the best head lettuces for forcing under glass or early planting out doors. Plants medium size, having thick, dark green leaves, and when well grown forming compact, solid heads, which blanch easily and are crisp and tender. Should not be planted in the hot weather of summer, as it runs up to seed quickly. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Tilton's White Star (SEED WHITE)—A distinct sort of great merit, of the Black Seeded Simpson type, but grows larger and more rapidly, and its leaves are broader, thicker, darker and less frilled at the edge. It forms a large and solid central cluster of leaves, making almost a head; blanches perfectly and is of excellent quality. The plants remain long in condition for use before running to seed, and keep long after cutting without wilting. Repeated trials, both for forcing and early planting out doors convince us that this is a decided improvement over other varieties of this class for either purpose. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Early Prize Head (SEED WHITE)—The enormous demand for this old favorite proves conclusively that it has no superior where a thin, tender, crisp and sweet lettuce is wanted for the home garden or local market. Being so thin leaved and tender, it of course wilts very quickly after cutting, and so it is not adapted for growing for distant markets. Plant large, deep green, so washed with red as often to appear more red than green; forming a head of a dense mass of leaves rather than one like a cabbage, and very slow to run to seed; leaves large, nearly round, frilled at the edge, and coarsely savoyed or "blistered;" exceedingly crisp, tender and good flavored, and do not become bitter as early as other varieties. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Hanson (SEED WHITE)—So well known as to hardly need any description. Plant large, forming a large, flat head, resembling that of a cabbage, and so slow to run to seed that it often fails to form any seed. Outer leaves bright green with prominent, light colored veins, inner leaves white and usually curved and twisted at the base, very tender and sweet. We have seen heads of this variety as large as a cabbage and about as solid. It is the standard summer head lettuce. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Philadelphia Butter or Early Whitehead (SEED WHITE)—Many prefer a thick leaved, smooth lettuce, and to meet this demand we present this sort. Plant dark green, with many nearly round, thick leaves, formed into a very solid, round head, which stands a long time without running to seed. Leaves *very thick*, folded or puckered at the base, the inner ones blanched to a rich yellow color, and exceedingly rich and nutty in flavor. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Black Seeded Simpson—For those who like a large, thin, exceedingly tender leaf, and for those markets which demand a large, loose cluster of leaves, rather than a solid head, this is one of the best varieties either for forcing or early sowing out of doors. Plants large, forming a large loose head; light yellowish-green in color, so that a little wilting is not noticed. Leaves large, thin, slightly ruffled and blistered, the inner ones nicely blanched, and even the large outside leaves are tender and of good quality. One of the best and most popular varieties for market gardeners, as it is attractive, of excellent quality, and continues a long time in condition for use. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Simpson's Early Curled (SEED WHITE)—Similar to the last, but the plant is a little smaller and decidedly darker in color, and the leaves are more frilled and blistered. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Brown Dutch (SEED BROWN)—An old sort, noted for its hardness. Leaves large, thick, green, tinged with brown. It always forms a large, solid head, which is somewhat coarse-looking, but the inner leaves are beautifully blanched, exceedingly sweet, tender and well flavored. Desirable because of its hardness and fine quality. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Buttercup (SEED WHITE)—Plants medium size, with numerous round, smooth leaves, which are of a beautiful yellow color, and very sweet and tender. They form medium-size, fairly solid heads which, when prepared for the table, are exceedingly attractive in appearance. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Large Drumhead, or Victoria Cabbage (SEED WHITE)—The largest of the heading lettuces. Plant very large, forming an immense loose head, bright green without and light green or white within. Leaves very large, strongly veined, coarse, but the inner ones are very crisp and tender. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Deacon (SEED WHITE)—While this does not make as large a head as some others, the heads formed are very solid and of excellent flavor, and remains in condition for use as long as any variety in cultivation. Plant medium size, with very few outer leaves; leaves light green, very thick. This is certainly one of the best varieties for summer use. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

The Cos lettuces are distinct from the preceding sorts, in having long, narrow, spoon shaped leaves, which usually fold into loose, sugar loaf shaped heads, which blanch better by having the outer leaves drawn about them and tied. They are justly celebrated throughout Europe on account of their exceeding crispness, tenderness and delicate flavor, and are becoming more and more popular in this country as they become better known.

Cos, Early White Self-Folding (SEED WHITE)—A distinct Cos lettuce which does not need tying up. The leaves are yellowish-white in color, long, narrow, upright, folding into a solid head like that of an Early York Cabbage. This is a truly self-blanching lettuce, is very crisp and tender and of superior flavor. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Leek

French, *Poireau*. German, *Lauch*.

Belongs to the onion family and by some preferred to that vegetable. Sow the seed and care for the young plants same as for onions. When the young plants are about the size of a goose quill, transplant to a prepared bed in rows one foot apart and four or five inches in the row. Set the roots deep and draw the earth to them when cultivating, so that they may be well blanched by the time they are fit for use.

London Flag—Is the variety more cultivated in this country than any other. It is hardy and of good quality. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 30c, lb \$1.00.

Large American Flag—A variety which has become very popular with some market gardeners on account of its being larger than the London Flag. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Large Rouen—Stem very large but comparatively short; the leaf is very broad but covered with whitish bloom. Stands a long time in condition for use. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

Monstrous Carentan—The largest variety; often three inches in diameter, and becoming very white and tender; a very hardy sort. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.50.

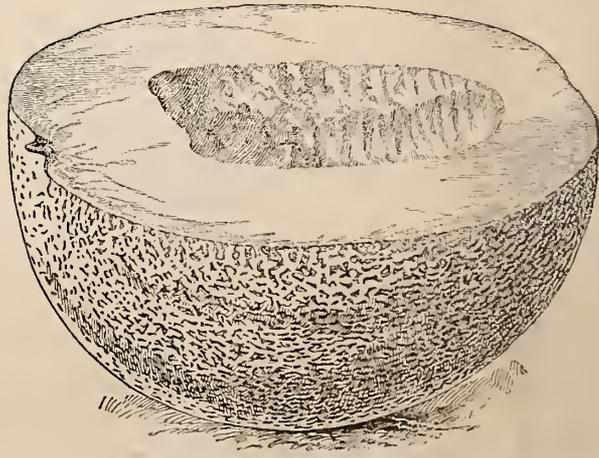
Melon, Musk

French, *Melon*. German, *Zucker Melon*.

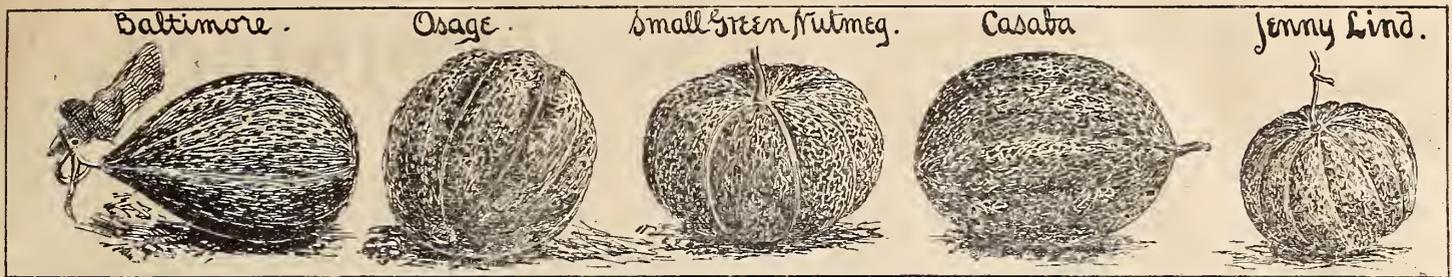
The Musk Melon is too universally popular to need any special description.

CULTURE—Cultivate as recommended for cucumbers, except that the hills should be six feet apart. *Rich earth* for the young plants is far better than manure, but if the latter must be used see that it is well rotted. If the plants grow very rank, more and finer fruit will be secured by pinching off the end of the shoots when about three feet long. The quality of melons of all varieties is largely dependent upon conditions of growth and ripening. Unhealthy vines or unfavorable weather produce fruit of comparatively poor flavor.

Cosmopolitan—This grand, new, green-fleshed variety, combining as it does the *firm, sweet flesh* of the French Cantilope and the *delicious* flavor of the American Musk Melon is truly cosmopolitan in character. It is one of the most distinct and uniformly handsome melons ever introduced. The hardy vine is *wonderfully* productive of globular fruits, which are densely covered with gray netting. It is *exceedingly sweet, melting* and high flavored. Pkt 5c, oz 10, $\frac{1}{4}$ lb 30c, lb \$1.00.



Cosmopolitan



Melon, Musk—Continued.

Jenny Lind—An extra early green fleshed melon, and one of the sweetest in cultivation. Fruits globular or flat globe shaped, ribbed and covered with a shallow netting; medium size to small. One of the best melons for hotel and restaurant use on account of its convenient size. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Small Green Nutmeg—Fruit medium size slightly ribbed, globular. Skin dark green, becoming yellow when over ripe, and nearly covered with broad shallow netting. Flesh thick, a little coarse, but of fine flavor. This variety is in universal demand for both home and market use. It is the size so much sought after by hotels and restaurants. Our stock is carefully grown and selected, and will be found first class in every particular. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Improved Large Green Nutmeg—Vines vigorous, hardy, productive; fruit very large, round, slightly flattened at both ends, ribbed, covered with coarse netting; flesh very thick, and of the highest flavor. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Baltimore, or Acme—Fruit medium size, oval, slightly pointed at stem end, slightly ribbed, covered when ripe with coarse netting. Flesh thick, green, very fine flavored and sweet. We think this one of the most *uniformly* good melons we have on our list. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Hackensack, or Turk's Cap—Fruit very large, flattened globe shape ribs large and of irregular width, densely covered with coarse netting; flesh green, thick, coarse, but very sweet and fine flavored. We have taken great pains to have our stock of this true to the "Turk's Cap" type, and after careful comparison with that of other growers do not hesitate to pronounce it the best in the Country. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Montreal—Our stock of this variety unlike most offered, is of distinct and uniform type. Fruit of the largest size often measuring twelve to fourteen inches in diameter; spherical, or slightly oval in shape, with regular, shallow ribs, and sparsely covered with netting; flesh light green, very juicy, sweet and of excellent flavor. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Bay View—Fruit long and of the largest size, frequently weighing fifteen to seventeen pounds; deeply ribbed and covered with coarse netting; flesh green, thick and of fine flavor. A favorite in some markets. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

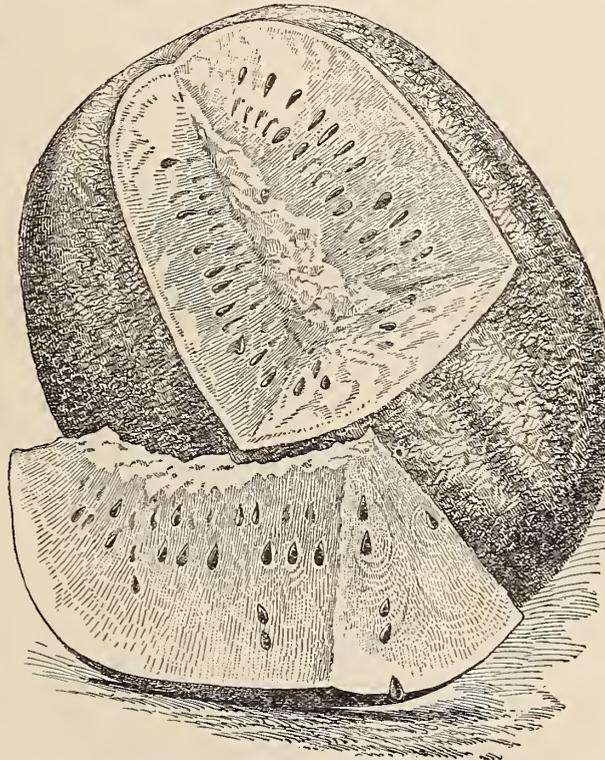
Casaba or Green Persian—One of the largest and best musk melons in cultivation. Fruit long, oval, a little pointed at each end; flesh green, very sweet. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Red or Yellow Fleshed Sorts

Osage or Improved Miller's Cream—This melon has made its way into public favor from the market rather than the garden. And seems to be just what people want. It is medium size, oval, slightly ribbed, dark green in color, covered more or less with shallow netting. The flesh is deep salmon color, exceedingly sweet and high flavored, and is good to within a fourth of an inch of the rind, and very thick, there being but a slight cavity in the center of even the largest fruit. A favorite variety in some markets. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Emerald Gem—The standard of excellence among the salmon fleshed varieties. Fruit small to medium size, globular, or slightly flattened at the ends, only slightly netted and ribbed. Skin deep green while young, becoming tinged with yellow as the fruit matures; flesh deep salmon yellow, thick, ripening close to the rind, and is unsurpassed in flavor. This variety has steadily grown in popular favor and in many large markets leads a 1 other kinds. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Surprise—This old variety is still highly esteemed by many. Vines hardy and productive; fruit oval, not deeply ribbed, covered with slight patches of netting; skin yellowish-white; flesh deep salmon color. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.



Water Melon

French, *Melon d'eau*. German, *Wasser-Melone*.

CULTURE—The essential thing is to get a good strong vine early in the season, which may be secured by forming a large well drained hill of earth, made very rich with an abundance of well rotted manure, which should be thoroughly mixed with the soil, for if left in a mass, it will lead to the plants burning out under the hot sun, and thus to the failure of the crop. On this hill plant the seed as soon as the ground is warm and dry, and carefully protect the young plants from insects, and hasten their growth by the use of liquid manure.

Sweet Heart

Sweet Heart—This variety has no equal as a melon to ship to distant markets, and it is so attractive in appearance that it is readily sold when all others are a drug. Of the largest size, a little longer than thick, but nearly globular in shape. Skin very bright, beautiful mottled green. Flesh bright red, firm and heavy, but crisp, melting and exceedingly sweet. This melon is not only a good keeper, but it improves in quality for a long time after ripening. Seeds dark gray. Pkt 5c, oz 10c, ¼ lb 25c, lb 75c.

Citron—Grows uniformly round and smooth, striped and marbled with light green. Flesh white and solid; seeds red. It should be borne in mind that this variety is not used for eating in the raw state, but for preserves, pickles, etc. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.



WATER MELON—Continued

Ice Cream—Medium size, with scarlet flesh and very sweet; a good variety for main crop. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 25c, lb 75c.

Phinney's Early—A valuable variety, hardy and a sure cropper. Vines vigorous and productive, fruiting quite early; fruit medium size, oblong, smooth, marbled with two shades of green; rind thin, flesh pink, *very sweet*, tender and crisp. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Peerless—The best melon for private gardens and for market gardeners who deliver direct to consumers, but is also grown extensively in some sections for shipping in car-load lots distances of two or three hundred miles. Vine moderately vigorous, hardy, productive; fruit medium size, oval, finely mottled; rind thin; flesh bright scarlet, solid to the center, crisp, tender, and of the highest flavor. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Black Spanish—Vines small, so that they may be planted closer than most sorts. Fruit round, very dark green, with sweet scarlet flesh and black seed. It is not so large as some of the other sorts, but is very hardy and a certain cropper. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Gypsy, or Georgia Rattlesnake—One of the largest varieties, and stands shipment long distances. Fruit cylindrical, square at the ends, smooth, distinctly striped and mottled light and dark green. Flesh bright scarlet and very sweet. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Cuban Queen—Fruit medium size to large, globular or oval; skin striped light and dark green in sharp contrast; rind medium thick, but stands shipment well. Flesh bright red, solid, very crisp and sugary. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Dixie—A popular market sort. Vines vigorous, large growing and hardy; fruit medium size to large, about one-third longer than thick. Color of skin dark green striped with a lighter shade; rind thin but tough; flesh bright scarlet, ripens closely to the rind, is of the best quality and free from the hard, coarse center, which is so objectionable a feature of many shipping melons. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Kolb's Gem—Vines of medium size, but remarkably vigorous and healthy. Leaves of medium size, deeply cut with a peculiar frilled edge. Fruit of the largest size, round or slightly oval, marked with irregular mottled stripes of dark and light green. Outer rind or shell exceedingly hard and firm, making it a popular sort for shipping long distances. Flesh bright red, solid, a little coarse, but sweet and tender. Seeds dark gray. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Boss—The very dark green long fruit has very bright red, exceedingly sweet flesh, extending to within one-fourth inch of the rind. A splendid sort for the home garden, but too thin rinded for shipping. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Long Light Icing—Our stock of this sort is much better than that usually offered. The melons are uniformly long and large, and the flesh deep rich red and of splendid quality. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Round Light Icing—Fruit medium size, round, very light green or white, mottled with slightly darker green. Flesh bright, light red, very sweet and tender. By many this is considered the best of all melons. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Dark Icing—Fruit large, nearly round, dark green, very indistinctly mottled with lighter shade. Flesh very rich, bright red. The juice, which is very abundant, is of rich, deep color and flows so freely as to be available as a drink. All of our stocks of Icing Melon are pure and perfectly distinct, showing very uniformly the characteristics of each sort as described. Repeated trials have demonstrated that our stock of the Icing varieties are very much more pure and distinct than those obtainable elsewhere. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Mountain Sweet—A large, oval variety; rind green; flesh scarlet and quite solid to the center, very sweet and delicious. This is an old standard sort, and one of the best for the home garden. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Mustard

French, *Montard*. German, *Senf*.

Mustard is not only used as a condiment, but the green leaves are used as a salad, or cut and boiled like spinach.

CULTURE—Should be the same as that of cress.

White English—The leaves are light green, mild and tender when young; seed light yellow. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 40c.

Southern Giant Curled—This mustard is very highly esteemed in the South, where the seed is sown in the fall, and the plants used very early in the spring as a salad. Our stock is the true curled leaf. The seed is brown and produces plants which often grow two feet high and of greater breadth, forming enormous bunches. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 15c, lb 50c.

Seed Potatoes "The True and Tried"

We have had the reputation for a number of years of being headquarters in the Northwest for new varieties of potatoes. Our list this year comprises the very cream of all the new varieties and many of the old kinds. Farmers can make big money by planting of these varieties and selling to their neighbors next year at fancy prices.

The Freeman Potato—A Potato containing more New fresh Blood than any other since the Introduction of the Early Rose.

Sold at \$3.00 per Pound in 1891. \$7.50 per Bushel, \$15.00 per Barrel in 1892.

\$4.00 per Bushel, \$7.50 per Barrel in 1893 and 1894.

Such a record was never before made for any potato. The introducer says: "Not only have I sold out every Freeman I had on hand, but thousands of dollars have to be returned to disappointed customers. Tens of thousands of dollars has been made by my friends, who followed my advice and planted largely of the Freeman variety during the last five years. The Freeman has not only equaled but surpassed all claims made for it, and is unanimously pronounced by 50,000 America potato growers, a perfect wonder. No potato was ever before so gratuitously advertised in the Agricultural Press or by the thousands, who have planted it; I really believe more enthusiastic testimonials have been written concerning Freeman in the last five years, than were ever before written of any other variety. There is no gainsaying the fact that the Freeman Potato is unquestionably the strongest grower, and contains more new, fresh blood than any other sort; it has also shown unusual developments both as to early ripening, enormous productiveness, etc., etc. It is admitted by all to be the finest flavored potato on the market, and when once tried it will be used for the table to the exclusion of all other varieties. In some sections of the country it is not quite as early as the Early Ohio, but taking the country over it is the best early ever put in the hands of the American potato grower. In introducing the Freeman potato to the American public, I did so with the belief that it was destined in the next few years to create as great a furore and to sell at as high prices as the Early Rose in the first few years of its introduction, twenty-five years ago. While my ideas were extremely high, to tell the truth, I hardly expected the result that has come to pass.

"The tuber is oval in shape, russet in color; flesh very white, both raw and when cooked, very fine grain and of very best flavor. The greatest merits of the variety are its extreme earliness, and long-keeping qualities. From the time they are as large as hen's eggs until new potatoes come in the next year, they burst open when boiled with their jackets on, and appear snow-white and floury. Last year (1889) I planted some of my Freemans on June 4th, and on July 13th—thirty-nine days from planting—I dug the first mess of fine potatoes for dinner. They grow very quickly, and ripen here several weeks in advance of Early Rose. They are also a first-class yielder; I have frequently dug six to nine pounds from a single hill, and in rich ground there are few small ones."

Prices of Freemans for 1896: 1 lb 30c, 3 lb 60c postpaid. By express or freight, peck 50c, bushel \$1.50.

The Irish Daisy Potato—Said to be the greatest drought resister of them all. First offered the American public in 1895. The Irish Daisy is a seedling of the Empire State, possessing all the strong qualities of its parent; is not quite so large in size, but perfect in form. Eyes shallow and pure bright straw color, on sandy land, shading down to a brilliant white. The Irish Daisy, put out and grown by trusty growers on gravelly land, heavy soil and sandy loam, alongside of all other heavy yielding late potatoes, has outyielded them in every instance. Vines are stocky in growth, a dark, rank green, and seem to stand dry weather better than any other late variety. They have never blighted yet, therefore might safely be guaranteed to be blight-proof. The growth in the hill is a marked peculiarity of this potato. We dug in the fall of '93 one hill containing 27 merchantable potatoes, with a net weight of over 15 pounds, from two eyes of seed planted. With common field culture on ordinary sandy loam, they yielded at the rate of a bushel from five hills for the entire field. They ripen with Rural New Yorker No. 2, White Star and Monroe Seedling, and will outyield any one of these three varieties two to one. For eating purposes the quality cannot compare with the Freeman or Thoroughbred, which are undoubtedly the finest flavored potatoes known. For a potato to sell from the wagon or by market gardeners, or grocers direct to customers, they will outsell every other variety, owing to their attractive form, shape and pure white coloring.

Prices of the Irish Daisy for 1896: Pound, 40c; 3 pounds, 75c by mail, postpaid; by express or freight, peck, 75c; bushel, \$2.25.

Rural New Yorker No. 2—1 lb 35c, 3 lb 50c, by mail postpaid—by express or freight, peck 40c, bushel \$1.25.

Beauty of Hebron—1 lb 35c, 3 lb 50c by mail postpaid—by express or freight, peck 40c, bushel \$1.25.

Burpees Extra Early—1 lb 35c, 3 lb 50c by mail postpaid—by express or freight, peck 40c, bushel \$1.25.

Vicks Early Market—1 lb 35c, 3 lb 50c by mail postpaid—by express or freight, peck 40c, bushel \$1.25.

Early Rose, Burbanks, White Elephant, Early Ohio and Garnet Chili—furnished at market prices. TRUE STOCK.

Okra

French, Gombo. German, Ocher.

This is an annual from the West Indies, cultivated for its green seed pods, which are used in soups, or stewed or served like asparagus. It is highly esteemed in the South for making gumbo soup. The pods when young and tender should be sliced in sections and strung on a thread and hung up in the shade to cure like dried apples. In this condition they can be used for soup at any time.

CULTURE—Sow the seed thinly in dry, warm soil, in shallow drills two feet apart. After the plants are up, thin them out to nine inches apart; hoe frequently and draw a little earth to the stems as they continue to grow. Gather the pods when quite green, and about an inch and a half long.

White Velvet—This variety is a great improvement on the old White or the Green. The plant is of medium height, bearing a large crop of white, smooth, tender pods, which retain their tenderness until nearly full size. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

Dwarf White—The longest podded variety. Two feet high, very productive, mature pods a foot long, very thick and fleshy. Pkt 5c, oz 10c, ¼ lb 15c, lb 50c.

MUSHROOM SPAWN

English per pound brick, 30c post paid.

ONION HOW TO RAISE ONIONS

This is a question we are asked many times every year and we will try to answer briefly.

THE SOIL

A good crop of onions can be grown on any soil which will produce a full crop of corn, unless it be a stiff clay, very light sand or gravel, or certain varieties of muck or swamp lands, on which they invariably grow necky and cannot be made to ripen down well, while other muck soil gives immense crops of the finest quality. The difference is largely due to drainage. Muck land must be sweet and well drained, in order to raise good onions; ordinary swamp land will not do, and even in the best of muck, the first crop is apt to be soft and necky. We prefer a rich, sandy loam, with a light mixture of clay. This is much better if it has been cultivated with hoed crops, kept clean of weeds and well manured for two years previous, because if a sufficient quantity of manure to raise an ordinary soil to a proper degree of fertility is applied at once, it is likely to make the onions soft.

MANURING

There is no crop where a liberal use of manure is more essential than in this. Even on the deep, black muck onion lands manure is essential to a good crop, and not only is the quantity but the quality of the manure used, of the greatest importance. If it is too rank it is quite sure to make soft onions, with many scallions. It should be well fermented and shoveled over at least twice during the previous summer to kill weed seeds. Of the commercial manures, we prefer fine ground bone and superphosphates.

PREPARATION ...

Remove all refuse of previous crops in time to complete the work before the ground freezes up, and spread the composted manure evenly, at the rate of about fifty cart loads to the acre. This should first be cultivated in, and then the ground plowed a moderate depth, taking a narrow furrow, in order to thoroughly mix the manure with the soil. Carefully avoid tramping on the ground during the winter. Cultivate or thoroughly drag the soil with a heavy harrow as early in the spring as it can be worked, and then, in the opposite direction, with a light one, after which the entire surface should be raked with steel hand rakes. It is impossible to cultivate the crop economically unless the rows are perfectly straight; to secure this, stretch a line along one side, fourteen feet from the edge, and make a distinct mark along it; then having made a wooden marker, something like a giant rake with five teeth about a foot long and standing fourteen inches apart, make four more marks by carefully drawing it with the outside tooth in, and the head at right angles to the perfectly straight mark made by the line. Continue to work around this line until on the third passage of the marker you reach the side of the field where you began; measure fifteen feet two inches from the last row, stretch the line again, and mark around in the same way. This is better than to stretch a line along one side, as it is impossible to prevent the rows gradually becoming crooked, and by this plan we straighten them after every third passage of the marker.

SOWING THE SEED

This should be done as soon as the ground can be gotten ready, and can be done best by a hand seed drill. This should be carefully adjusted (testing it by running it over the barn floor), to sow the desired quantity of seed and about one-half inch deep. The quantity needed will vary with the soil, the seed used, and the kind of onions desired. Thin seeding gives

CULTIVATION

Give the onions the first hoeing, just skimming the ground between the rows, as soon as the year can be seen the length of the row. The blade of the hoe we use for this purpose is eight inches long and one and one-half broad, with a long, crooked shank, set in a handle five feet long. This hoe allows the earth to pass over the blade without moving it out of its place. Hoe again in a few days, this time close up to the plants, after which weeding must be continued. This operation requires to be carefully and thoroughly done. The weeder must work on his knees astride of the row, stirring the earth around the plants, in order to destroy any weeds that have just started. In ten days or two weeks they will require another hoeing and weeding similar to the last; and two weeks later give them still another hoeing, and if necessary another weeding. If the work has been thoroughly done at the proper time, the crop will not require further care until ready to gather.

GATHERING

As soon as the tops die and fall, the crop should be gathered by pulling four rows and laying them in a single one, the tops all one way, and then returning on the next row, forming a similar row, but with the tops in the opposite direction; laying the tops in this way greatly facilitates the "topping." If the weather is fine they will need no attention while curing, but if it is not they will need to be stirred by simply moving them slightly along the row. Cut off the tops when perfectly dry, about half an inch from the bulb, and throw each pair of rows together, forming windrows about nine feet apart. After a few days more of bright weather they will be fit to store.

FOR PICKLES OR SETS

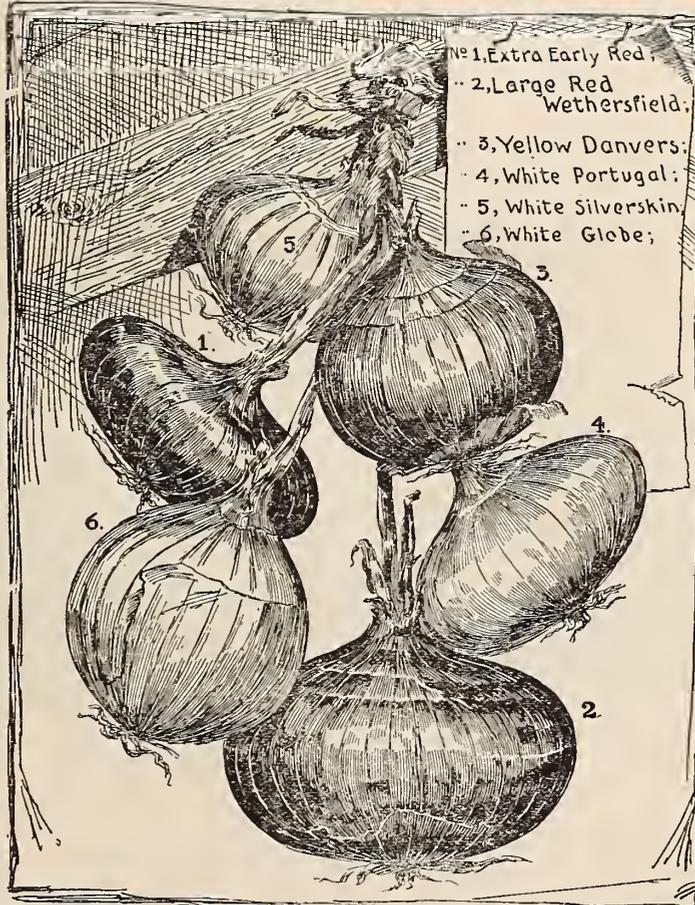
Use good soil, prepared as above and sow the seed very thick in broad drills, forty to sixty pounds to the acre.

KEEPING ONIONS THROUGH WINTER

The essentials for the preservation of onions are dryness, thorough ventilation, coolness and freedom from frost, or if frozen they must not be permitted to thaw and freeze again. One of the most popular methods of keeping onions is to spread straw to the depth of eighteen inches upon the barn floor, scaffold, or garret; upon this spread the onions six to ten inches deep, and cover with two feet of straw. If in good condition and sufficient depth of covering is used, they will keep in fine condition till May.

A cool, dry cellar of some out-building, barn or carriage-house will be found excellent for keeping onions, if it has windows for ventilation. The cellar of a dwelling house is usually too warm. They should be spread on scaffolds, about six inches deep with room enough between the boards for the air to circulate. On approach of cold weather close the doors and windows, and keep the temperature just above the freezing point. With proper care they can be kept from freezing, and will come out nice and sound in spring.

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Thorough preparation of the ground, careful sowing and the best of after culture will avail nothing unless seed of the best quality is sown. Given the same care and conditions, the product from two lots of seed of the same variety, but from different growers, may be so unequal in the quantity of merchantable onions, that the good seed would have been the cheaper at ten times the cost of the inferior.

Our thorough equipment, with long experience in growing onion seed of the very best quality, enables us to say, without hesitation, that our stock is equal, if not superior, to any.

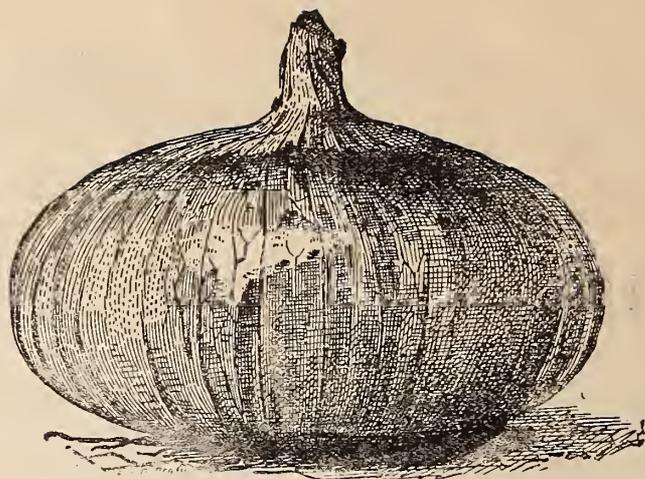
Three Leading Onions for the Northwest

OREGON YELLOW DANVER, PRIZETAKER,
MAMMOTH SILVER KING

See Descriptions Below

LEADING VARIETIES. We would call ESPECIAL ATTENTION to our OREGON GROWN ONION SEED, as it is undoubtedly the best strain for planting in the NORTHWEST. Our winters are so damp that onions grown from the best EASTERN or CALIFORNIA SEED will not keep nearly so well. In fact, local merchants have frequently refused to buy such onions at any price, at the same time PAYING HALF A CENT MORE THAN MARKET PRICE for onions grown from our OREGON GROWN SEED, claiming as a reason that they can well afford to make this difference, AS THE ONIONS GROWN FROM OUR OREGON SEED KEEP SO MUCH LONGER.

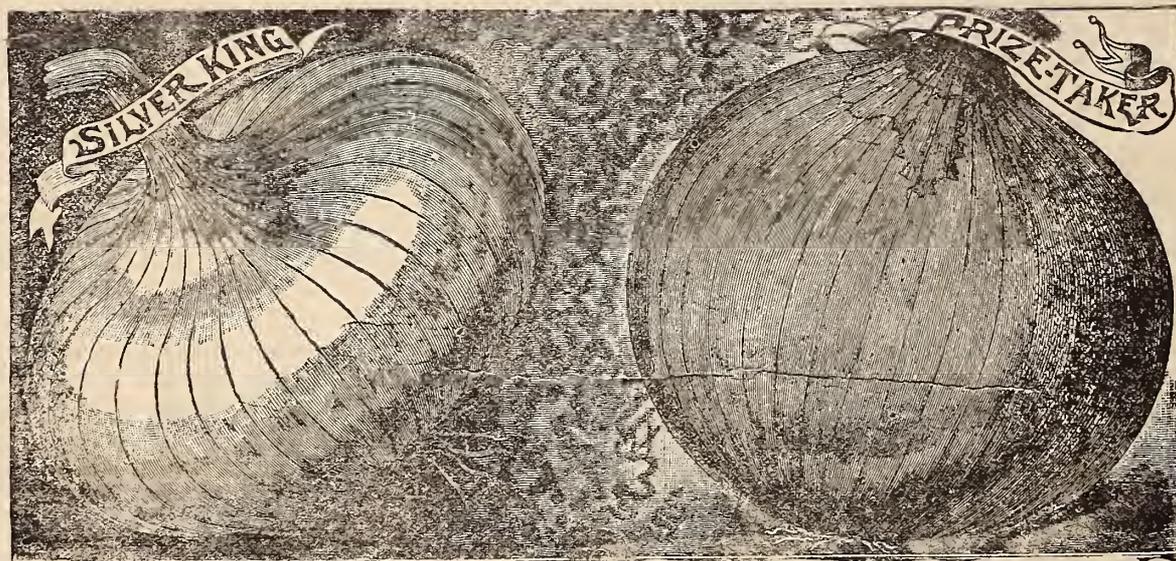
Oregon Yellow Danvers, or Long Keeper—This is the variety planted almost exclusively in the Northwest for the reason that the crop can be kept in good condition through our long, wet, warm winters. Many cars of this variety went East the past season in May after the Eastern California crops were rotted and out of the way. While the Mammoth Silver



Oregon Yellow Danvers, or Long Keeper, One-third Natural Size

King and Prizetaker are far more profitable for a home market, that is a retail trade, because they command a fancy price, still we advise the Oregon Yellow Danver for general crop.

NOTICE—There are several who claim to handle this stock, but we would caution buyers to be sure and get our original stock. Seed grown by us can be absolutely relied on, and our prices are way down. Pkt 5c, oz 15c, ¼ lb 30c, 1b 90c, 4 lbs or over 85c per lb.



THIS ILLUSTRATION IS LESS THAN ONE-QUARTER NATURAL SIZE OF THE ONIONS

Mammoth Silver King—In appearance this is the most striking onion grown. We hardly know which to commend the most, its large size, symmetrical appearance and beautiful silvery flesh, or its sweetness, tenderness and mild flavor. These qualities make it not only the best for exhibition and fancy high priced trade, but for the home table it is unsurpassed. Pkt 5c, oz 15, ¼ lb 40c, 1b \$1.25.

Extra Early Red—A medium sized flat variety; an abundant producer, and very uniform in shape and size; moderately strong flavored, and comes into use nearly two weeks earlier than the Large Red Wethersfield; very desirable for early market use. Pkt 5c, oz 15c, ¼ lb 40c, 1b \$1.40.

Large Red Wethersfield—This is the standard red variety. Large size, skin deep purplish-red, form round, somewhat flattened, flesh purplish-white, moderately fine grained, and stronger flavored than any of the other kinds. Very productive, the best keeper, and one of the most popular for general cultivation. It is more inclined to form large necks if planted on unsuitable soil, than the Danvers, but is the best variety on poor or dry soils. Pkt 5c, oz 15c, ¼ lb 40c, 1b \$1.50.

Yellow Danvers—A fine productive variety of medium size, skin copper-yellow, flesh white, comparatively mild and well flavored. Pkt 5c, oz 10c, ¼ lb 30c, 1b \$1.00.

Yellow Globe Danvers—The ideal Danvers onion was originally oval or nearly flat, and it has been thought by many that its small neck and splendid ripening habit could only be obtained in onions of that shape, but by careful selection and breeding developed a strain having to a remarkable degree the ripening habit and small neck of the original Danvers and yet decidedly globular in form, thus giving larger yields and handsomer bulbs without sacrificing any of the good qualities of the most popular of yellow onions. A trial will convince the most conservative planter that this is a real improvement. Pkt 5c, oz 10c, ¼ lb 30c, 1b \$1.00.

White Portugal, or American Silverskin—A large, flat onion of mild flavor, fine for early winter use, and much esteemed for pickling. It is the best keeper of the white varieties. Pkt 5c, oz 25c, ¼ lb 75c, 1b \$2.25.

White Silverskin—The bulbs are comparatively small and very white. Grow rapidly when young. Very valuable for bunching. Pkt 5c, oz 10c, ¼ lb 30c, 1b \$1.00.

White Globe—Yields abundantly, producing handsome and uniformly globe-shaped bulbs. The flesh is firm, fine grained, and of mild flavor. Sometimes called Southport White Globe. Pkt 5c, oz 25c, ¼ lb 75c, 1b \$2.25.

Prizetaker—This onion is very closely related to the Spanish King, but is really an improvement on that favorite sort, owing to its careful selection and growth in this country. Its cultivation here has resulted in such increased size and greater solidity as really to entitle it to be classed as a new variety. It is perfectly globe shaped with bright straw colored skin; the necks are very small and the onions always ripen up hard. An excellent keeper, exceedingly fine flavor, grows to an enormous size. Onions weighing six pounds having been grown from seed the first year. The prize onion of this variety last year weighed six pounds and two ounces. Pkt 5c, oz 20c, ¼ lb 60c, 1b \$1.75.

ONIONS—Continued

FOREIGN ONIONS

The following varieties have been tested in this country, and have given perfect satisfaction. The flavor of the Italian varieties is mild, and they are every way well adapted to culinary purposes.

Queen—A silver-skinned variety, of quick growth and remarkable keeping qualities. If sown in early spring it will produce onions one to two inches in diameter early in summer, and if sown in July, will, with favorable weather, be ready to pull late in autumn, and be sound and fit for use until the following summer. Particularly valuable for pickles. If sown thickly, they will mature perfect, hard onions from one-half to three-quarters of an inch in diameter. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Giant White Italian Tripoli—A large, beautiful, pure white, flat onion of mild and excellent flavor. Will produce a somewhat larger onion from seed than our White Portugal; but to attain their full size the plants should be started very early in a hot-bed and set out in rich soil. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Giant Rocca—An immense Onion. Globular in form, skin light brown, flesh mild and tender. It will produce a large onion from seed the first season, but to attain the largest growth, very small bulbs or sets should be set out the second spring, when they will continue increasing in size, instead of producing seed, as is the case with American onions. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Bulbs or Sets

Top Sets, or Buttons—These produce on the top of the stalk instead of seed, a number of small bulbs or onions, about the size of acorns, which, if planted, will produce a large Onion, maturing earlier than from seed. The large onion produces the top onion, and the little top onion produces the large onion. Pkt 30c 1b postpaid—by Express 20c, or 5 lb 80c.

Yellow Bottom Sets—30c 1b postpaid—by Express 20c, or 5 lb 80c.

Parsley

French, *Persil*. German, *Petersilie*.

Very useful for flavoring soups, stews and for garnishing. The green leaves are used for flavoring, or they may be dried crisp, rubbed to a powder and kept in bottles until needed.

CULTURE.—It requires rich, mellow soil. The seed is even slower than parsnip in germinating, and should be sown as early as possible in the spring, in drills one foot apart, and when the plants are well up thin to one foot in the row. When the leaves become old and dull they may be cut off and the plant will start a new growth which will be brighter and better curled. The fern leaved and moss curled varieties make beautiful border plants.

Plain—Leaves plain or flat and very dark colored. It is often preferred on this account and because of its hardness. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Champion Moss Curled—A compact growing, finely cut and much curled variety, of a bright green color. Owing to its fine color and density of foliage it is much sought after. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Carter's Fern Leaved—The leaves are finely cut and give the plants a feathery, fern-like appearance. Makes a handsome border plant. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Fine Tripled Curled, or Myatt's Garnishing—A fine free growing but not large variety. The plants bear a great number of leaves, which are so abundant and so finely curled that they resemble a bunch of moss. The leaves are bright, pale green, and exceedingly handsome. Greatly prized for garnishing and table decoration. One of the best for market or private gardens. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Turnip Rooted, or Hamburg—The root, which resembles a small parsnip, is the edible portion of this variety, which is extensively grown and used for flavoring soups, etc. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Parsnip

French, *Panais*. German, *Pastinake*.

The value of the Parsnip as a culinary vegetable is well known, but not generally appreciated at its full value for stock feeding. On favorable soil it yields an immense crop of roots, which are more nutritious than carrots or turnips, and particularly valuable for dairy stock.

CULTURE.—They do best on deep, rich, sandy soil, but will make good roots on any soil which is deep, mellow and moderately rich, but fresh manure is apt to make the roots coarse and ill shaped. As the seed is sometimes slow to germinate, it should be sown as early as possible in drills two feet to two and one-half feet apart; cover one-half inch deep, and press the soil firmly over the seed; give frequent cultivation, and thin the plants four to the foot.

Long White Dutch, or Sugar—Roots very long, white, smooth, tender, sugary and of most excellent flavor. Very hardy, and will keep through winter without protection. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Hollow Crown or Guernsey—Roots comparatively short, ending somewhat abruptly with a small tap root; grows mostly below the surface; has a very smooth, clean skin, and is easily distinguished by the leaves arising from a depression on the top or crown of root. Pkt 5c, oz 10c, ½ lb 20c, lb 50c.

PEAS



If Peas, Beans or Corn are wanted by Mail add 8 cents per Pound for Postage



French, *Pois*. German, *Erbsen*.

CULTURE.—For early peas the soil should be light, warm and sheltered, but for general crop a moderately heavy soil is better. Fresh manure, very rich or wet, mucky soil should be avoided, as they cause a rank growth of vine at the cost of the quality of the peas; such soil is often the cause of the early sorts maturing unevenly. Sow as early as possible a few of the earliest varieties on warm, quick, soil, prepared the fall before. The general crop can be delayed until later, but we have met with better success from sowing all the varieties comparatively early, depending for succession upon selecting sorts that follow each other in ripening. The peas will mature earlier if covered only one inch deep, and where earliness is the most important thing, they may be treated in that way, but larger pods and more of them will be produced if the seed is planted in trenches three to six inches deep, covered with one or two inches of soil until the plants are above the surface, then filling the trenches; this will secure deep rooting, prevent mildew and prolong the bearing season. If the peas are covered to the full depth at first, or if water is allowed to stand in the trenches, they will not make a good stand of healthy plants.

Extra Early Sorts

Earliest of All, or Alaska—Smooth, blue pea, which in evenness of growth of vine and early maturity of pods is unequalled by any other extra early pea. Vines two to two and one-half feet high, unbranched, bearing four to seven long pods, which are filled with medium-size, dark-green

The Crop should be gathered as soon as it becomes fit for use. Even if a few pods begin to ripen, young pods will not only cease to form, but those partly advanced will cease to enlarge.

peas of excellent flavor. Ripe peas small, bluish-green. Ripens all the crop at once, and an invaluable variety for market gardeners and canners. Pkt 10c, lb 14c.

Ferry's First and Best—By most careful comparison we are convinced that this is the earliest and most even stock of white extra early peas in existence, maturing so well together that a single picking, or at most, two, will secure the entire crop. Vines vigorous and hardy, two to two and one-half feet high, unbranched, bearing three to seven straight pods, having five to seven medium size, smooth peas of good quality. Dry pea medium size, smooth, yellowish-white. Pkt 10c, lb 14c.

American Wonder—A variety whose stout branching vines only grow about nine inches high, and are covered with long, well-filled pods, containing seven or eight large, exceedingly sweet, tender and well-flavored peas, nearly as early as First and Best. Dry pea medium size, much wrinkled and flattened, pale green. We have taken great pains in growing our stock, and know it to be pure and true. Pkt 10c, lb 15c.

Premium Gem—This variety is nearly as early as the American Wonder, and the vine is decidedly larger, growing to height of from 12 to 15 inches, and bearing an immense crop of pods which are larger and invariably well filled with peas of the best quality. The dry peas are green, large, wrinkled, often flattened. Market gardeners use more of this sort than of any other wrinkled pea. Pkt 10c, lb 14c.

PEAS—Continued

McLean's Little Gem—A very desirable, early dwarf, green, wrinkled variety, growing about fifteen inches high. When in a green state it is very large, sweet and of delicious flavor. Pkt 10c, lb 14c.

Second Early Sorts

McLean's Advancer—A green wrinkled variety, about two and a half feet high, with broad, long pods, which are abundantly produced and well filled to the end. Considered by some the best of its season, which is directly after Premium Gem, and is of most excellent flavor. This pea is used very extensively by the market gardeners in the vicinity of New York, on account of its great productiveness, the fine appearance of its pods, and its fine flavor. It is very largely used among canners, as the skin will stand cooking without breaking. After careful comparison with other stocks we are convinced that ours is the best. Pkt 10c, lb 14c.

Bliss' Everbearing—A variety maturing soon after the Gems, and continuing a long time in bearing. Vine stout, about eighteen inches high, bearing at the top six to ten broad pods. If these are removed as they mature, and the season and soil are favorable, the plant will throw out from the axil of each leaf, branches bearing pods which will mature in succession, thus prolonging the season. The large wrinkled peas cook very quickly, are tender, of superior flavor, and preferred by many to any other sort. Pkt 10c, lb 14c.

Telephone—This pea has proved to be a valuable acquisition. Vines large, with large, coarse leaves. Pods very large, filled with immense peas, which are tender, sweet, and of excellent flavor. Notwithstanding the large amount of inferior and spurious stock which has been sold, no pea of recent introduction has gained more rapidly in popularity than this, thus showing that it has sterling merit, which gardeners appreciate. The stock we offer is prolific and has been carefully selected. Pkt 10c, lb 14c.

LATE SORTS

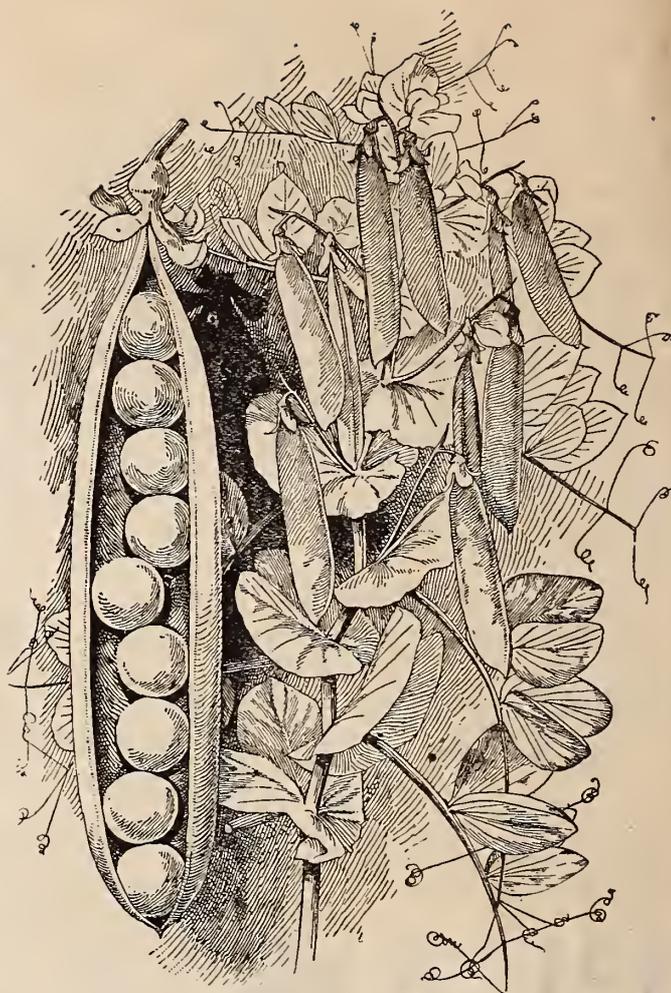
Yorkshire Hero—Vines stout, about two feet high, bearing at the top a number of broad pods filled with large peas, which keep a long time in season, and never become as hard as most sorts. They are of fine quality and will be preferred to any other by those who like a rich, marrow-like pea. Pkt 10c, lb 12½c.

Improved Stratagem—A sort in which the good qualities which gave the old Stratagem its popularity, are so developed as to make this a distinct variety. We do not hesitate to pronounce this by far the best of the large podded peas; the pods are of immense size, very uniformly filled with very large, dark green peas of the finest quality; vine medium height, but very stocky, with very broad, light green leaves, and bearing an abundance of large, handsome pods; one of the very best varieties for market gardeners. Pkt 10c, lb 20c.

Champion of England—Universally admitted to be one of the richest and best flavored peas, and very productive. Height four or five feet; seed whitish-green and much shriveled. Very inferior and mixed stocks of this sort are often offered, but when the seed is as well grown and selected as that we offer, we consider this variety equal in quality to any in cultivation, and the best of its season either for the amateur or market gardener. Pkt 10c, lb 12½c.

Large White Marrowfat—Cultivated very extensively for the summer crop. About five feet high, of strong growth. Pods large, cylindrical, rough, light colored and well filled; seeds large, smooth, round and yellow or white, according to the soil in which they are grown. It is excellent for summer use, but inferior in quality to the new sorts, although undoubtedly one of the most productive of the garden varieties. Pkt 10c, lb 12½c.

Large Black Eye Marrowfat—An excellent variety, growing about five feet high; pods large; a prolific bearer and can be recommended as one of the very best Marrowfat sorts. Pkt 10c, lb 12½c.



Improved Stratagem

Melting Sugar—There is a class of peas (little known in this country, but much used abroad,) in which the large, sweet, brittle and succulent pods have none of the tough inner lining found in the ordinary varieties of garden peas. They are used in the same way as snap or string beans. We offer a very pure stock of MELTING SUGAR, the best of these edible podded sorts. The pods are very large, straight extremely tender, fine flavored and are borne in great abundance on vines three to four feet high. Pkt 10c, lb 25c.

PEPPER . . .

French, *Piment*. German, *Pfeffer*.

CULTURE.—The same as for egg plant; the plants need quite as much heat to perfect them, but mature sooner and may be sown later, or even planted out of doors after warm weather has fairly set in. Guano, hen dung, or any other bird manure, hoed into the surface soil when the plants are about six inches high, will wonderfully increase the product and also improve the quality of the fruit.

Red Cherry—Plant tall, bearing a profusion of bright red, round fruit, which is very pungent when ripe. The plant is very handsome and an ornament to the garden. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Red Chili—Used in the manufacture of pepper sauce. Pods sharply conical and exceedingly pungent when ripe. Requires a long, warm season. The plants should be started quite early in hot bed. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Ruby King—An improved American sort reaching the largest size, yet retaining the symmetrical shape of the smaller sorts. It is very bright colored; beautiful, sweet and mild flavored and one of the best for stuffed pickles. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Long Red Cayenne—A long, slim, pointed pod, and when ripe of a bright red color. Extremely strong and pungent. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Large Squash—Fruit large, flat, tomato shaped, more or less ribbed; skin smooth and glossy; flesh mild, thick meated and pleasant to the taste, although possessing more pungency than the other large sorts; very productive and the best variety for pickling. One of the earliest and most certain to mature. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Golden Dawn—Plants quite dwarf, but very prolific. Fruit medium size and of inverted bell shape, rich, golden yellow color, with very thick, sweet mild flavored flesh. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Large Bell or Bull Nose—A very large sort of inverted bell shape, suitable for filling or for a mixed pickle. Flesh thick, hard and less pungent than most other sorts. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

Sweet Mountain—Plants very vigorous and productive, growing upright, with moderately large leaves. Fruit very large, long, often eight inches or more in length, by two or three in diameter, very smooth and handsome, being when green of a bright, deep green color, entirely free from any purple tinge, and when mature, of a rich red. Flesh very thick, sweet and mild flavored. Well suited to use as a stuffed pickle. Pkt 5c, oz 25c, ¼ lb 75c, lb \$2.25.

PUMPKIN...

French, *Potiron*. German, *Kuerbis*.

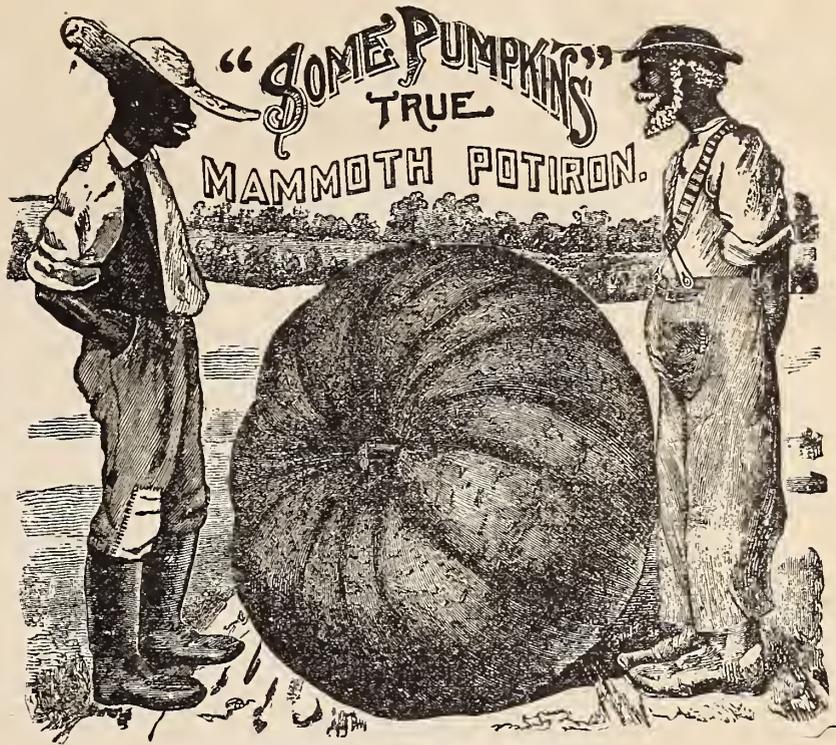
The pumpkin more properly belongs to the farm than the garden, especially as it readily mixes with and injures the quality of the squash.
CULTURE—Pumpkins are not so particular in regard to soil as melons or cucumbers but in other respects are cultivated the same, though on a larger scale. They are generally raised between hills of corn, but may be planted with success in fields by themselves.

Mammoth Potiron Pumpkin—The King of all Pumpkins. Has been grown to weigh over 225 pounds, and in France, where it is from, it is said to reach the enormous weight of 300 pounds. It has a salmon-colored skin, flesh bright yellow, fine grain, and of excellent quality, a splendid keeper. It is truly a colossal variety, and if you wish to astonish your neighbors and win first premium at county or state fair, do not fail to include a packet of Mammoth Potiron Pumpkin in your order. Pkt 10c, oz 15c, ¼ lb 50c, 1b \$1.50 post-paid.

Pie—Although introduced as Pie Squash we consider this a true pumpkin, and a real acquisition. Fruit small, nearly round. Smooth yellow skin, covered with gray netting. Fruit very thick, sweet and fine flavored. Makes very delicious pies.

Large Yellow—Grows to a large size and is adapted for cooking purposes and feeding stock. It is irregular in shape and size, some being depressed and flattened at the ends, others round or elongated, of deep, rich, yellow color, of fine grain and excellent flavor. Pkt 5c, oz 10c, ¼ lb 15c, 1b 50c.

Sweet Cheese, or Kentucky Field—By far the best variety for planting in the South. Large, oblong, mottled, light green and yellow, with very thick, sweet, tender, yellow flesh. Pkt 5c, oz 10c, ¼ lb 15c, 1b 50c.



THE TRUE MAMMOTH PUMPKIN
 Specimens Frequently Weighing 200 to 250 Pounds

Radish...

French, *Radis*. German, *Rettig*.

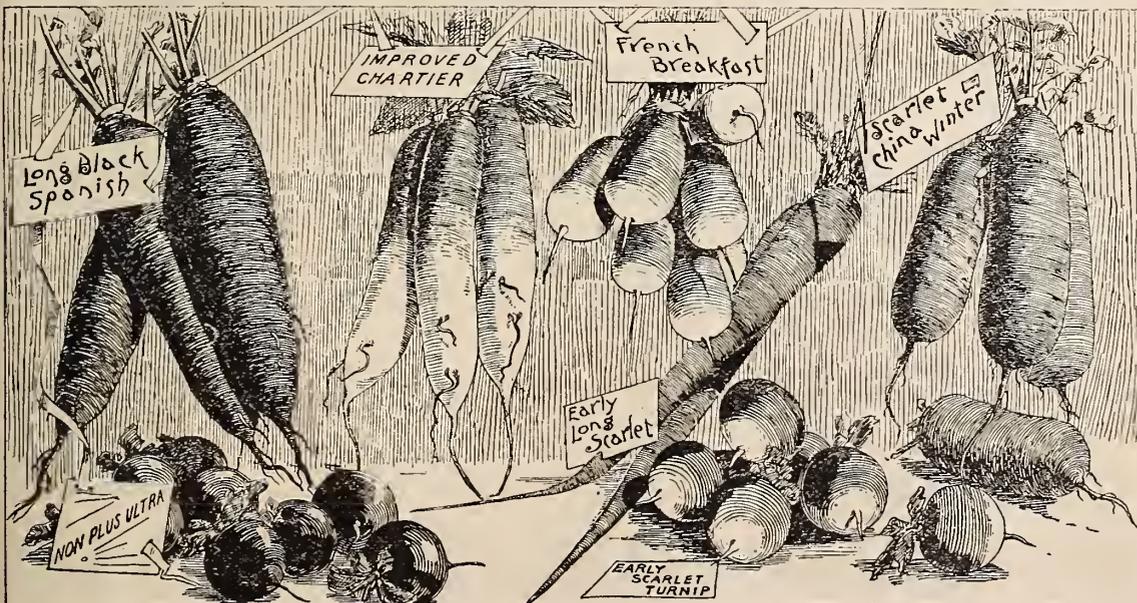
CULTURE—For the home garden sow on rich sandy soil as early in the spring as it is fit to work. For forcing sow in hot beds, having very rich, sandy soil, made perfectly level, scattering evenly over the whole surface from sixty to one hundred and fifty seeds to the square foot. Cover with one-half inch of soil sifted on and attend carefully to the watering and airing. If the bed is a good one the whole crop can be marketed in twenty-one to thirty days after planting. In open ground culture sow in drills twelve inches apart and thin to such a distance in the row as to prevent crowding. A good dressing of nitrate of soda will greatly stimulate growth and insure tender, brittle roots. Successional sowings from one week to ten days apart will keep up a supply. After the hot weather of summer begins it is better to sow the summer and winter varieties, as they do not become tough and stringy nor pithy so quickly as the early sorts. Radishes are subject to root maggots, which make them useless for culinary purposes. We know of no certain remedy for this pest. The best preventative measures with which we are familiar, are to avoid the use of rank manure and sowing on ground where radishes, turnips or cabbages were grown the year previous.

Non Plus Ultra or Early Deep Scarlet Turnip, Forcing—This has as small a top and is as early as any variety in cultivation, making it one of the best for forcing. Roots fit for use may be had in three weeks or less from time of sowing. Roots small, globular, deep rich red color; flesh white, crisp and tender when young. May be planted very closely owing to its small tops. Pkt 5c, oz 10c, ¼ lb 20c, 1b 65c.

Early Scarlet Turnip Rooted—A small, round, red, turnip shaped radish, with a small top and of very quick growth. A very early variety, deserving general cultivation on account of its rich color, and crisp, tender flesh. Desirable for forcing or early out door planting. Pkt 5c, oz 10c, ¼ lb 20c, 1b 65c.

Early Scarlet Turnip, White Tipped—One of the handsomest of the turnip radishes and a great favorite in many large markets, for early planting out doors. While it is not a distinctively forcing radish, it is but little later than the best of that class, and will give entire satisfaction, where extreme earliness is not the primary object. Roots slightly flattened on the under side, color very deep scarlet with a white tip, flesh white and of the best quality. We recommend this as one of the best for home or market use. Pkt 5c, oz 10c, ¼ lb 20c, 1b 65c.

Early White, Olive Shaped—Differs from the Scarlet Olive Shaped in color and in being a little longer. The roots when well grown, are clear white. Pkt 5c, oz 10c, ¼ lb 20c, 1b 65c.



RADISH—Continued

Early White Turnip Rooted—A little flatter than the Scarlet Turnip Rooted and pure white in color. It has a very small top; white, semi-transparent flesh, and is slightly later than the Scarlet Turnip in maturing, but will stand more heat and remain longer in condition for use. An inferior strain is often sold under the name of White Boy. Pkt 5c, oz 10c, ¼ lb 20c lb 65c.

Early Scarlet, Olive Shaped—In the form of an olive, terminating in a very slim tap root. Skin scarlet; neck small; flesh rose colored, tender and excellent. Early and well adapted for forcing or general crop. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

French Breakfast—A medium sized radish, olive shaped, small top, of quick growth, very crisp and tender, of a beautiful scarlet color, except near the tip, which is pure white. A splendid variety for the table, on account of its excellent quality and its beautiful color. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Long Brightest Scarlet, White Tipped—The brightest and handsomest scarlet color we have seen in any radish. We think this variety is a decided improvement in earliness and color over other varieties of this class. It makes roots fit for use in about twenty-five days, when planted out doors. It has a small top and no tendency to neckiness. It may also be used for forcing; grows to the same size as Wood's Early Frame. Market gardeners should use this for early planting, as its color alone will make it sell. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Early Long Scarlet, Short Top Improved—This is a standard variety for private garden or market use, particularly for out door culture. It grows six or seven inches long, half out of the ground, is uniformly straight and smooth; is very brittle and crisp, and of quick growth; color bright scarlet; top small. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Improved Chartier—Although this American variety is too strong growing to be used for forcing, it is one of the very best for sowing out doors. The roots come to usable size very early, remaining hard and crisp until they reach a diameter of one and one-half or two inches, and so furnish good roots two or three times as long as any of the above. Roots scarlet-rose above, shading into white at the tip. They are long, cylindrical for the upper two-thirds, and then gradually taper to the tip. Flesh white, crisp and mild flavored. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Long White Vienna, or Lady Finger—Earlier than the last, with straight, smooth, white roots; flesh white, very tender, crisp and juicy. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Long Black Summer—In this distinct sort we have a true summer radish, which may be planted from March to July and treated in every way as any other, and if planted late is as good in every respect for winter use as the Long Black Spanish Winter. Top very much smaller than that variety; roots a little shorter, more symmetrical and smoother skin; tapers more abruptly at the tip; color of skin much deeper black; flesh as white and firm, flavor about as pungent. The handsomest black radish and is worthy of thorough trial. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

White Strasburg—This grows to the largest size and is usable when quite small, thus covering a long season. The mature roots are four to five inches long and about two inches thick; very white; the flesh is exceedingly crisp and tender. One of the best of the large summer sorts. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Early White Giant Stuttgart—Root large, often four inches in diameter, top shaped. Skin white; flesh white and crisp, and not becoming strong or pithy until very late, so that those not used as a summer radish can be stored for winter use. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Winter Varieties

CULTURE.—Sow about the same time as winter turnips, on light, rich soil, in drills eighteen inches apart; give frequent cultivation, and thin, two to six inches apart, according to size of the variety. For winter use pull before severe frost, and store in damp sand in cellar.

Scarlet China, Winter—Roots cylindrical, or largest at the bottom, tapering abruptly to a small tap. Skin very smooth and of a bright rose color; flesh firm like the Black Spanish, but more pungent. Pkt 5c, oz 10c, ¼ lb 25c, lb 80c

California Mammoth White China, Winter—First introduced into this country by the Chinese in California. It is pure white, about one foot long and two or three inches through tapering regularly to the tip. The flesh is tender and crisp, keeping well through the winter. Pkt 5c, oz 10c, ¼ lb 25c, lb 80c.

Long Black Spanish, Winter—One of the latest as well as the hardest of the radishes; an excellent sort for winter use. Roots oblong, black, of very large size and firm texture. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Round Black Spanish, Winter—Roots round, sometimes top-shaped, three or four inches in diameter; skin black, flesh white, very compact and highly flavored. An excellent sort for winter, as the roots keep a long time. Pkt 5c, oz 10c, ¼ lb 20c, lb 65c.

Rape

This plant is extensively grown in Europe and Canada for forage, especially for sheep, and for green manure, for which purpose there is, perhaps, no plant better adapted where a *quick, rank* growth is desired.

CULTURE.—Prepare the ground as for turnips and sow in June or July, with a turnip drill, in rows two and one-half feet apart, at the rate of two and one-half pounds seed per acre. It may be sown broadcast at the rate of five pounds per acre. We handle only one variety of rape for sowing, the *Dwarf Essex*, which is a biennial, and is used in this country almost exclusively for pasture and green manure. Our stock can be relied upon to be the *true Dwarf Essex*, and not the annual variety, which has been extensively distributed and proven to be not only worthless for pasture, but by self-seeding has in many cases become a pernicious weed. Pkt 5c, oz 10c, lb 30c, by freight 8c.

Rhubarb, OR PIE PLANT

French, *Rhubarbe*. German, *Rhabarber*.

Rhubarb, familiarly known as Pie Plant, or Wine Plant, is cultivated in gardens for its leaf stalks, which are used for pies and tarts. Immense quantities are now annually sold in all the large markets. No private garden should be without it.

CULTURE.—Rhubarb succeeds best in deep, somewhat retentive soil. The richer its condition and the deeper it is stirred the better. Sow in drills an inch deep, and thin out the plants to six inches apart. In the fall transplant the young plants into very highly manured soil, setting them three feet apart each way, and give a dressing of coarse manure every fall. The stalks should not be plucked until the third year, and the plant never allowed to exhaust itself by running to seed. Our seed is saved from selected plants of Linnæus, Victoria, Giant and other improved sorts. Like the seeds of fruit trees, rhubarb seed cannot be relied upon to reproduce the same variety. We also have the roots for sale.

Victoria.....	Pkt	Oz	¼ Lb	Lb.
Giant.....	5	10	40	1 25
Linnæus.....	5	15	40	1 25
Rubarb Roots 15c each, \$1.00 per doz by Express. By mail prepaid, 25c each, \$2.00 per doz				

Salsify, OR VEGETABLE OYSTER

French, *Salsifis*. German, *Hafer-Wurzel*.

The long, white tapering root of Salsify resembles a small parsnip, and when cooked is a good substitute for oysters, having a very similar flavor.

CULTURE.—It succeeds best in light, well enriched soil, which should be stirred to a good depth. If it is necessary to use manure, it should be very fine and well rotted, for if it is fresh and coarse, the roots will grow irregular and ill-shaped. Sow early and quite deep, giving the general culture recommended for parsnip. The roots are perfectly hardy and may remain out all winter, but should be dug early in spring, as they deteriorate rapidly after growth commences. Store a quantity for winter use in a pit, or in a cellar in damp earth or sand.

Large White—The old sort, roots medium size, smooth, flesh white. Pkt 5c, oz 10c, ¼ lb 30c, lb \$1.00.

Mammoth Sandwich Island—This is in every way superior to the old sort, being larger, stronger growing, and less liable to branch. Invaluable to market gardeners. Pkt 5c, oz 15c, ¼ lb 40c, lb \$1.25.

Spinage

French, *Epinard*. German, *Spinat*.

The spinage is very hardy, extremely wholesome and palatable, and makes a delicious dish of greens, retaining its bright green color after cooking.

CULTURE.—Should be planted in very rich ground, the richer the better. Sow in drills one foot apart and commence thinning out the plants when the leaves are an inch wide. All should be cut before hot weather, or it will be tough and strugy. For early spring use the seed should be sown early in autumn. In the North the plants will require a slight protection of leaves or straw, but in the Southern States no protection is necessary, and they will continue their growth most of the winter.

Improved Thick Leaved—An improvement on the preceding, with larger and thicker leaves, and of more substance. Particularly recommended for market garden use. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

Long Standing—An improved round seeded strain of excellent merit, having all the good qualities of the ordinary sorts. It is especially desirable because it goes to seed much later than any other variety. This will be highly appreciated by market gardeners. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

Long Standing Prickly—The plants mature a little later than the round leaved sorts, but furnish a large quantity of very thick and well flavored leaves. This is one of the best sorts for market gardeners. Has prickly seed. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

Prickly Winter—The hardest variety, and will withstand the severest weather, with only a slight protection of leaves or straw. The seed is prickly, leaves triangular, oblong or arrow shaped. It is employed for fall sowing, which in this latitude is made about the first of September. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

Round Leaved Winter—A sort which is very popular with many gardeners; the leaf is shorter and rounder, but thicker than the Prickly Winter, and it seems quite as hardy. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

Round Summer—This variety is generally preferred for early spring sowing, and is the most popular with our market gardeners; the leaves are large, thick and fleshy, not quite so hardy as the Prickly Winter, but stands the winter very well. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

Savoy Leaved—The earliest variety and one of the best of the best to plant in autumn for early spring use. Plant of upright growth with narrow, pointed leaves which are savoyed like those of cabbage. It grows quickly to a suitable size for use, but soon runs to seed. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

SQUASH . . .

French, *Courge*. German, *Kuerbis*.

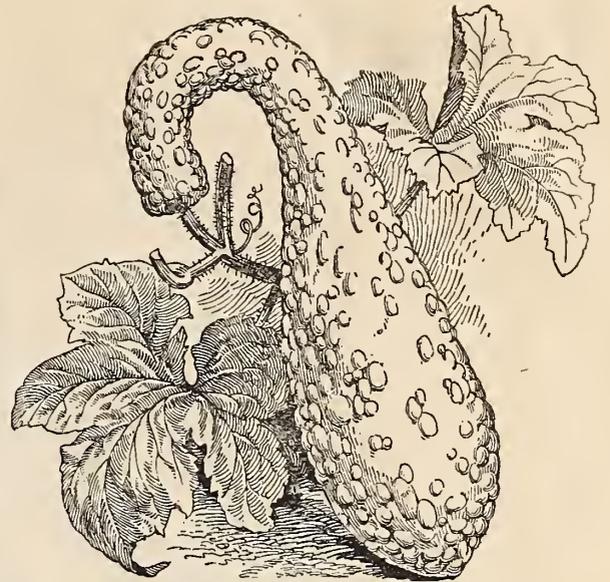
The squash is one of the most nutritious and valuable of all our garden vegetables. The summer varieties come to the table early in the season while the winter sorts can be had in perfection from August until the summer varieties are again in condition. Few farmers appreciate the value of winter squash as food for stock. We think an acre of squash, costing no more to cultivate and much less to secure, will give as much food available for feeding stock as an acre of corn, and we strongly urge our readers to try a "patch" for this purpose.

CULTURE.—The plants are very tender and sensitive to cold, and planting must be delayed until settled warm weather. The general principles of culture are the same as those given for cucumbers and melons, but the plants are less particular as to soil. The summer varieties should be planted four to six feet apart each way, and the winter sorts eight to ten. Three plants are sufficient for a hill. Care should be taken not to break the stems from the squashes intended for winter use, as the slightest injury will increase the liability to decay.

Early Yellow Bush Scallop—An early, flat scallop shaped variety, color yellow flesh pale yellow and well flavored; very productive; used when young and tender. Pkt 5c, oz 10c, ¼ lb 30c, lb 60c.

Early White Bush Scallop—Similar in form to the preceding, but with a clear white skin, and more tender and delicate flesh. By many considered the best of summer varieties. Pkt 5c, oz 10c, ¼ lb 30c, lb 60c.

Mammoth Summer Crookneck—It is the best summer squash, and for these reasons: It is twice as large as the ordinary Summer Crookneck, far more warty, and several days earlier. This combination of earliness, large size and wartiness, which adds so much to its attractiveness, makes it altogether the most desirable squash for the market or private garden. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.



White Summer Crookneck

White Summer Crookneck—Introduced in 1895. This novelty is the result of several years' careful selection and will be certain to give general satisfaction. The ivory white fruit of this new distinct and beautiful variety always attracts attention, as it is much handsomer than the Yellow Summer Crookneck. It comes perfectly true, and has pleased all who have tried it. Our stock can be relied upon to produce fruits uniform in shape, form and color and unequalled in beauty and quality. Pkt 10c, oz 20c, ¼ lb 60c, lb \$2.00.

Mammoth White Bush Scallop—Many seedsmen have listed Mammoth White Bush Scallop Squash, but until this stock in 1895, there was no uniformly large, clear white scalloped squash in trade. We have carefully compared our stock with that obtained elsewhere and find it much superior, the fruit being larger, clear white and of handsome form. The best of the scalloped squashes. Pkt 5c, oz 10c, ¼ lb 25c, lb \$1.00.

WINTER VARIETIES

Boston Marrow—A fall and winter variety, very popular in the Boston market. Of oval form; skin thin, when ripe, bright orange mottled with light cream color; flesh rich salmon yellow, fine grained, and for sweetness and excellence unsurpassed, but not as dry as the Hubbard. We have an unusually good stock of this sort. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Early Prolific Marrow—A variety developed by selection from the Boston Marrow, but much earlier and the earliest of the winter varieties. Fruit small, of deep orange color netted with cream; shape similar to Boston Marrow, flesh thick, deep yellow, of fine quality. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

Hubbard—This is a superior variety; and the best winter squash known; flesh bright orange yellow, fine grained, very dry, sweet and rich flavored; keeps perfectly good throughout the winter; boils or bakes exceedingly dry, and is esteemed. Pkt 5c, oz 10c, ¼ lb 20c, lb 60c.

CULTURE—The seed should be sown as early as possible after danger of frost is over. A good plan is to burn a quantity of brush and rubbish in the spring, on the ground intended for the seed bed, then dig and thoroughly pulverize the earth and mix with the ashes, after which the seed may be sown and covered very lightly. When the plants are about six inches high, transplant into rows four or five feet apart each way, and cultivate thoroughly with plow and hoe.

Hester—A variety which originated in Granville county, N. C. Has no superior for the yellow type, and makes fine cigar stock. It has size, shape, texture and color, and ripens early. It recommends itself greatly in this, that it has greater adaptability over a wider range of soils and latitude than any other of the yellow varieties, and may, on this score, be considered the surest. Pkt 5c, oz 20c, ¼ lb 60c, lb \$2.00.

Sweet Oronoco—Used for first-class plugfillers, and makes when sun cured, the best Natural Chewing leaf. A favorite for the "Homespun" wherever known. Known as Little Oronoco in some localities. Pkt 5c, oz 20c, ¼ lb 60c, lb \$2.00.

Havana—A hybrid Havana or Cuban seed leaf. A heavy cropper of fine texture, delightful flavor and the earliest cigar variety to mature and ripen. Pkt 5c, oz 40c, ¼ lb \$1.25, lb \$4.00.

Connecticut Seed Leaf—Best adapted to the climate of the Middle and Northern States, as it is more hardy and endures the cold better than the tender varieties grown South. In many of the Northern States and in Canada this variety is the staple crop. Pkt 5c, oz 20c, ¼ lb 60c, lb \$2.00.



Mammoth White Bush Scallop

SUGAR CANE

Early Amber—This variety is successfully grown in our extreme northern latitudes. It may be planted as late as the 15th of June, and will be ripe enough to manufacture in September. We know of no earlier variety. The beautiful, amber colored syrup it produces is thought to be superior in flavor to any other, and for sugar is unsurpassed. There are many varieties that can be profitably grown where the seasons are long, but this can be grown wherever Indian corn will mature. It is useless to plant cane seed before the weather is warm in spring. Three or four pounds are required per acre. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

Early Orange—An exceedingly valuable variety. Very large, of strong and vigorous habit, and does not fall down. Its yield is twenty-five per cent. in excess of the Early Amber. It has a very pleasant flavor. It is early, maturing only ten days later than the Early Amber. We recommend it highly to all desiring a superior cane, for all localities, except the extreme North. Pkt 5c, oz 10c, ¼ lb 15c, lb 35c.

TOBACCO

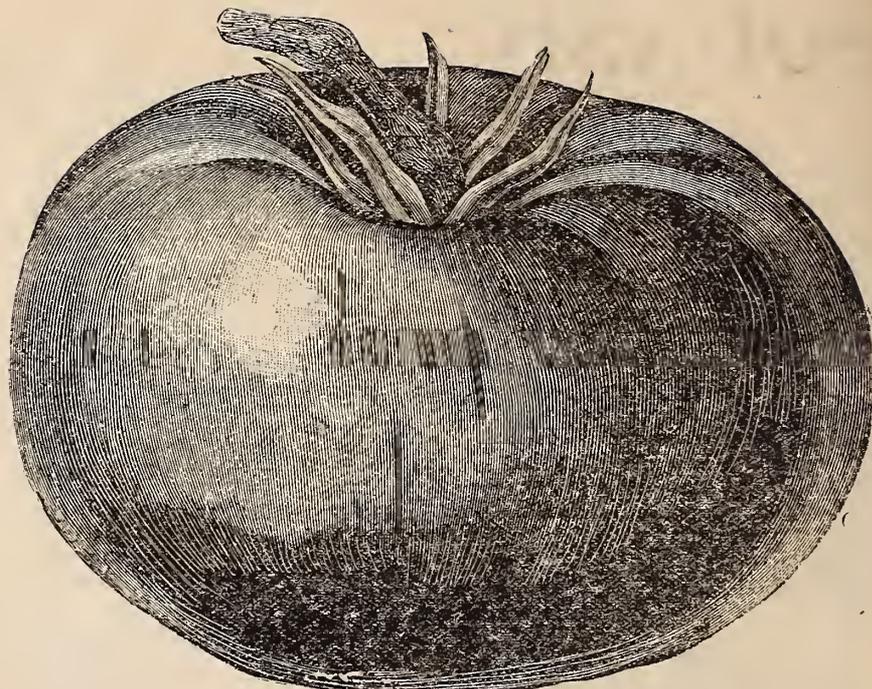
Tobacco is an annual plant, and although it grows to great size in the South, an equally good quality can be produced in the North. We have taken a great deal of pains to ascertain which are the best varieties for the general planter, and believe the list we offer contains all that are of special merit.

Tomato . . .

There are many other varieties offered by various seedsmen and we know that some of them are of great excellence, but we have not found any that were superior to some one on our list. We think a careful reading of the descriptions will enable one to select a sort from our list which will suit and be as good or better than can be procured elsewhere.

French, *Pomme d'Amour*. German, *Liebesapfel*.

CULTURE—Tomatoes do best on light, warm, not over rich soil, and success depends upon securing a rapid, vigorous, unchecked growth during the early part of the season. Sow in hot-beds from six to eight weeks before they can be set out of doors, which is when danger from frost is past; when the plants have four leaves transplant into shallow boxes or cold frames, setting them four or five inches apart; give plenty of air and endeavor to secure a vigorous but steady and healthy growth, so that at the time of setting in the open ground they will be strong and stocky. A slight check while the plants are small will materially diminish their productiveness. Set out of doors as soon as danger from frost is over, but before doing so harden off the plants by gradually exposing them to the night air and by the withdrawal of water until the wood becomes hard and the leaves thick and of a dark green color. Transplant carefully and cultivate well as long as the vines will permit. The fruit is improved in quality if the vines are tied to a trellis or stakes.



Atlantic Prize, The Earliest Tomato Known

First Early Red Sorts

Atlantic Prize—The fault of the distinctively early tomatoes was, that they have been lacking in size and symmetry. This is all changed now, and instead of the small, rough, deeply corrugated fruits of the hundred day type, we have an extra early variety, which will average with three-fourths of the medium and late sorts in both size and smoothness. That the Atlantic Prize ripens up a large proportion of its crop the earliest of any, has been proven by us conclusively after repeated plantings with all the other so-called extra early varieties year after year on our Trial Grounds. We do not hesitate to pronounce it the largest, smoothest, best flavored and brightest colored extra early tomato. Vine medium size, with few leaves, very hardy, bearing the fruit low down on the stem and in enormous clusters, which ripen all together. Those, whose trade demands, that they have a large, smooth, good flavored, *very early* fruit, will find this variety to be just what they want. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Early Michigan—There is no better variety than this for general market or family use. We speak emphatically because we know that for smoothness and regularity of shape, uniformity of size, color and freedom from rot or cracking, this variety is unsurpassed. It is not only an extremely smooth and perfectly shaped tomato, but it is also very early, ripening its first fruit almost as early as any sort. Vines large, with dark green leaves; vigorous large and wonderfully productive, being under high culture, one of the heaviest croppers; fruit medium size to large, and unlike most varieties, grows larger as the season advances, perfectly smooth, solid, but without any core; deep, rich red color and of excellent flavor. This kind is admirably adapted to canners' use. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Red Varieties For General Crop

Optimus—We believe the best table tomato, at least as far as quality is concerned. Vine medium size but vigorous, healthy and productive. Although not represented as a first early sort, many of our customers report that they have obtained ripe fruit from this as early as from any variety. Fruit medium size, oval, very smooth and of exceedingly bright, crimson-scarlet color; very free from cracks and rotting but little. The flesh is of a crimson-scarlet color, quite distinct. It is also one of the best in flavor and entirely free from the hard spots found in so many others. The Optimus is not only one of the best for home use and for market, but one of the best canning tomatoes. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Favorite—Vine medium, with large, dark green leaves, having numerous clusters of three to seven large tomatoes, which are a rich, dark red color, of oval outline, exceedingly smooth, flesh very firm, but without green spots. This is a favorite variety on account of its smooth, handsome fruit. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Royal Red—Vines stronger and more vigorous than the Favorite. The fruit is larger, brighter, deeper red and fully as good in quality. This is certainly a fine tomato for those who prize large size and bright color. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Trophy—Well known as one of the best. Vines of medium size, but producing compact clusters of fruit in immense quantities; fruit large, smooth, of bright red color, solid and of good flavor. The seed we offer is as good as can be grown. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Perfection—A variety similar to the last, but an improvement upon it, being a little earlier, and invariably smooth and handsome. It is one of the handsomest tomatoes grown, and all who have tried it, pronounce it of the highest quality. Has been used very satisfactorily for forcing under glass. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Purple Fruited Sorts

Acme—One of the smoothest and evenest in size and earliest of the purple fruited sorts. Vines large, hardy and productive, ripening its first fruit almost as early as any, and continuing to bear abundantly until cut off by frost. Fruit in clusters of four or five, invariably round, smooth and of good size, free from cracks and stands shipment remarkably well; flesh solid and of excellent flavor. For market gardeners who want an early purple fruited tomato either for home market, or to ship, for private gardens, or for canners, it stands without a peer among its class. This variety is used for planting under glass. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Essex Early Hybrid—Very similar to the Acme, fruit slightly darker purple, always smooth and handsome; quality among the best. Will certainly give satisfaction wherever the Acme does. Pkt 5c, oz 20c, $\frac{1}{4}$ lb 60c, lb \$2.00.

Dwarf Champion—This is a purple fruited variety which forms very stout, strong plants, about two feet high. The branches are short, making a bushy plant that stands quite erect without stakes. This sort is often sold as Tree Tomato. Fruit smooth, medium size; color purplish-pink, fairly solid, but has no hard core, and is of good flavor. About as early as any purple fruited tomato, and is quite popular in some localities, both for market and home use. The dwarf habit of the vines makes it very desirable for forcing, as it can be planted closer to the glass, and more closely on the bench, than the tall growing kinds. Our stock is a very superior strain, with larger, smoother fruit than the original. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Mikado, or Turner's Hybrid—The largest purple-fruited tomato, weighing as high as twenty-eight ounces, while the average weight is probably not less than twelve ounces. Vines large, coarse growing, with leaves entire, like those of the potato plant; very productive, and is early for so large a tomato, fruit extremely large, rough, solid, with few seeds. Demanded by those who want *extra large* fruit. Pkt 5c oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Miscellaneous Sorts

Golden Queen—The superior flavor of the yellow varieties is bringing them into favor as table fruit, and those who think of a yellow tomato as the rough fruit of the old yellow sorts will be surprised at this smooth, beautiful fruit; it being as smooth as the best of the red varieties, and of a fine and distinct flavor. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Husk Tomato, or Ground Cherry—This is much liked by many for preserves and for eating from the hand. The seed we offer is that of the *true* Yellow Ground Cherry, and not the purple fruited sort which is scarcely edible. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

TOMATO—Continued

Peach—This is a distinct and very attractive appearing tomato, highly desirable for preserving, eating from the hand, or table decoration. Fruit resembles a peach in shape, size and color, and is covered with a delicate down, which makes the deception quite complete; flesh tender and of good flavor. Should find a place in every garden. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Red Pear Shaped—Used for preserves and to make "tomato figs." Fruit bright red, distinctly pear shaped, and with a peculiar flavor. Our stock is the true pear shaped, and not the larger Red Plum tomato which is often sold under this name. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

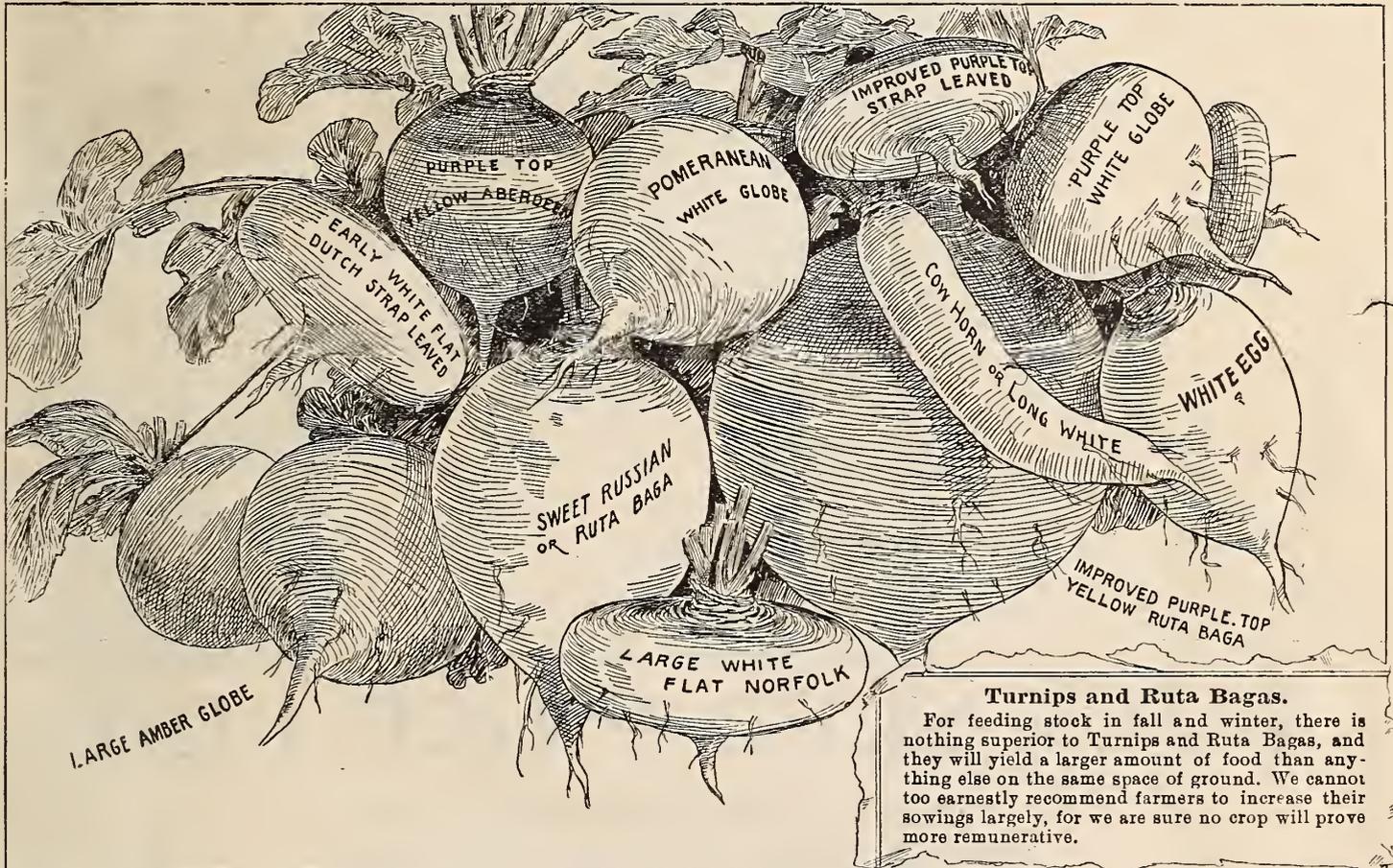
Yellow Plum—Fruit plum shaped, clear deep yellow color; flesh yellow and fine flavored; much esteemed for preserves. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Yellow Cherry—Differing from the preceding only in color. Pkt 5c, oz 25c, $\frac{1}{4}$ lb 75c, lb \$2.50.

Sunflower

The different species of *Helianthus* are largely grown for the seed, which is very valuable for feed and for oil. Every one who keeps poultry should use sunflower seed liberally for feeding, as there is nothing more wholesome and nutritious, and which keeps hens in better condition for laying. Some species are much planted in the flower garden for ornament.

Large Russian—This variety has large heads having much more and larger seeds than the common sort. Grows almost invariably to a single unbranched stalk. Sow the seed as soon as the ground is fit for corn in the North, later will do just as well South, in rows three and one-half feet apart and ten inches in the row. Cultivate same as for corn. In the Autumn, after the first hard frost, cut the heads of the stems with a corn knife and pile loosely in a rail pen with a solid floor or in a corn crib. After curing sufficiently, so that they will trash easily, flail out or run through a threshing machine. Let the seed remain in the chaff until danger from heating is past, then clean with an ordinary fanning mill. This variety will yield 900 to 1,200 pounds of seed per acre ordinarily. Pkt 5c, lb 25c.



Turnips and Ruta Bagas.

For feeding stock in fall and winter, there is nothing superior to Turnips and Ruta Bagas, and they will yield a larger amount of food than anything else on the same space of ground. We cannot too earnestly recommend farmers to increase their sowings largely, for we are sure no crop will prove more remunerative.

TURNIPS AND RUTA BAGAS...

French, *Navet*. German, *Steckrübe*.

This wholesome and agreeable vegetable is most easily affected in its form and flavor by soil, climate and mode of culture. There are a great many varieties, but we have selected the following as the best for the garden or farm.

CULTURE—Sow in drills fourteen inches apart, and half an inch deep, or sow broadcast, but in either case be sure to have the ground rich and freshly dug. Be careful to weed and thin out, so the young plants will not be checked and injured. Any overcrowding will result in rough and poor flavored fruit. For the spring and summer crops it is important to get them started very early so they may have time to grow sufficient size before hot weather, when they soon become tough and strong.

For the fall and main crop sow in the Middle and Western States from the middle of July to the last of August, as directed for the spring sowing. In the field turnips are generally sown broadcast, though much larger crops are obtained by drill culture.

To preserve turnips in good order for winter store them in barrels placed alongside the wall of a cool cellar and cover them with sand or turf to keep them fresh. Another method is to put them in a dry cellar or dry pit, and cover with straw and then earth over to the depth of eight or ten inches. Thus protected they will keep well till spring.

Extra Early Purple Top Milan—Tops very small, distinctly strap leaved, and growing very erect and compact. The roots are small and flat turnip shaped; skin purple on top of the root, clear white below; flesh white. The most desirable sort for forcing, or very early planting out doors. Pkt 5c, oz 15c, $\frac{1}{4}$ lb 40c, lb \$1.25.

White Egg—A quick growing, egg shaped, perfectly smooth, pure white variety, growing half out of the ground, with small top and rough leaves. The flesh is very sweet, firm and mild, never having the rank, strong taste of some white varieties. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Early White Flat Dutch, Strap Leaved—A most excellent early garden variety, much used in the Southern States. Roots medium size, flat; color white, very early, sweet and tender. It is desirable for table use, and is spongy and inferior when overgrown. Pkt 5c, oz 10c, $\frac{1}{4}$ lb 20c, lb 50c.

Early Purple Top Strap Leaved—This is an early variety and a great favorite for table use; form exceedingly flat, like a broad disk in shape, and

TURNIPS AND RUTA BAGAS—Continued

of medium size; color purple or dark red above ground, white below; flesh white, fine grained and tender; leaves few, entire, upright in growth. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Purple Top White Globe—A variety of the purple top flat turnip, from which it originated. It is globular in form, and nearly as large as the Pomeranian White Globe; of beautiful appearance, of most excellent quality, and equally desirable for table or stock. It keeps well and is a fine market sort. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Cow Horn, or Long White—This variety is carrot like in form, growing nearly half out of the ground, and generally slightly crooked. It is pure white, except a little shade of green at the top. It is delicate and well flavored of very rapid growth, and has obtained considerable favor as a market sort for fall and early winter use. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Large White Norfolk—A standard sort for field culture, which often attains a very large size; extensively grown all over the world for stock feeding. Shape spherical, or slightly flattened; color white. The seed should be sown a little earlier than table sorts. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Pomeranian White Globe—Is one of the most productive kinds; in good rich soil, roots will frequently grow to twelve pounds in weight. It is of perfect globe shape; skin white and smooth; leaves dark green and of strong growth. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Sweet German—This variety is very popular in many sections. It partakes largely of the nature of the Ruta Baga, and should be sown a month earlier than the flat turnips. The flesh is white, hard, firm and sweet; keeps nearly as well as the Ruta Baga. Highly recommended for winter and spring use. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Yellow Fleshed Sorts

Large Amber Globe—One of the best varieties either for table use or for a field crop for stock. Flesh yellow, fine grained and sweet; color of skin yellow, with green top. Hardy, keeps well, a good cropper, and grows to a very large size. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Orange Jelly, or Robertson's Golden Ball—Undoubtedly among the most delicate and sweetest yellow fleshed turnips yet introduced. Not of large size, but firm, hard and of most excellent flavor. Keeps well and is superior as a table variety. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Purple Top Yellow Aberdeen—Roots medium size, round; flesh pale yellow, tender and sugary; hardy and productive, and keeps well. It is an old esteemed variety, considered as approaching very nearly to the Ruta Baga in hardness and firmness of texture. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Swedes, or Ruta Bagas

CULTURE—Sow the seed about a month earlier than the preceding varieties of turnips. They should be sown on ground enriched with well rotted manure in drills two and one half feet apart, and thinned to six to eight inches apart in the row. Keep the weeds thoroughly in check with the hoe or cultivator, and when the roots have grown full size,

and before hard freezing weather, pull, cut off the top and store in a root cellar or pit. Ruta Bagas are some time sown broadcast and let take their chances with the weeds and bugs, but this method is only successful on new clearing in which there is no weed seed.

Improved Purple Top Yellow Ruta Baga—A hardy and productive variety. Flesh yellow, of solid texture, sweet and well flavored; shape slightly oblong, terminating abruptly; color deep purple above and bright yellow under the ground; leaves small, light green. Has but little neck. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Monarch, or Tankard Ruta Baga—This is a yellow fleshed sort, having very large, tankard shaped roots, with relatively small necks and tops. Color purplish-crimson above ground, yellow below; flesh very solid, fine grained and of the best flavor. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Yellow Swede, or Ruta Baga—Shape oblong; dull reddish color above ground, but yellow underneath; is harder than the common turnip and will keep solid till spring. Pkt 5c, oz 10c, ¼ lb 20c, lb 50c.

Herbs



	Pkt.	oz	¼ lb	lb
Anise.....	5	10	30	1 00
Balm.....	5	25	75	2 50
Basil, Sweet.....	5	15	40	1 50
Borage.....	5	10	25	75
Caraway, for sowing.....	5	10	25	75
Caraway, for flavoring.....	5	10	20	50
Catnip, makes an excellent bee pasture.....	5	40	1 25	4 00
Coriander, for sowing.....	5	10	25	75
Coriander, for flavoring.....	5	10	20	50
Dandelion, Cultivated or French Common.....	5	20	60	2 00
Dandelion, Improved Thick Leaved.....	5	50	1 50	5 00
Dill.....	5	10	25	75
Dill, Mammoth.....	5	15	40	1 50
Fennel, Sweet.....	5	10	30	1 00
Horehound.....	5	25	75	2 50
Hyssop.....	5	25	75	2 50
Lavender.....	5	15	40	1 50
Marjoram, Sweet.....	5	15	40	1 50
Rue.....	5	25	75	2 50
Saffron.....	5	15	40	1 50
Sage, Broad Leaf.....	5	10	30	1 00
Savory, Summer.....	5	15	40	1 50
Tausy.....	5	30	1 00	3 00
Thyme.....	5	25	75	2 25
Wormwood.....	5	15	40	1 50

BULK SEED PRICE LIST

SPECIAL TO BUYERS OF LARGE QUANTITIES. THESE

PRICES ARE FOR GOODS DELIVERED FREE ON BOARD

CARS, BUT PURCHASER MUST PAY ALL OTHER CHARGES

GET YOUR NEIGHBORS TO JOIN YOU AND PURCHASE IN QUANTITY

BEANS

Challenge dwarf Black Wax—\$8.00 per 100 lbs.
Black-Eyed Wax—\$9.00 per 100 lbs.
Golden Wax—\$7.00 per 100 lbs.
Round Yellow Six Weeks, Improved round Pod—\$7.00 per 100 lbs.
Early Mohawk—\$6.50 per 100 lbs.
Early China Red Eye—\$6.50 per 100 lbs.

SUGAR BEETS

Vilmorin's Improved Imperial Sugar—5 lbs or over 24 cts per lb.
French White Sugar Red Top—6 lbs or over, 24 cts lb.

MANGEL WURTZEL

Golden Tankard—5 lbs or over, 24 cts per lb.
Improved Mammoth Long Red—5 lbs or over, 24 cts per lb.

SWEET CORN

White Cob Cory—\$8.50 per 100 lbs.
Cory—\$7.50 per 100 lbs.
Crosby's Early—\$7.50 per 100 lbs.
Early Minnesota—\$7.50 per 100 lbs.
Stowell's Evergreen—\$6.25 per 100 lbs.
Mammoth—\$7.00 per 100 lbs.
Early Sweet or Sugar—\$7.00 per 100 lbs.
Early Red Blazed—\$5.00 per 100 lbs.

CARROTS

Half Long Scarlet Nantes, Stump Rooted—5 lbs or over, 50 cts per lb.
Improved Long Orange—5 lbs or over, 50 cts per lb.
Large White Belgian—5 lbs or over, 35 cts per lb.
Chantenay—5 lbs or over 50 cts per lb.
Guerande, or Ox Heart—5 lbs or over 50 cts per lb.

PEAS

Earliest of all, or Alaska—\$7.00 per 100 lbs.
Ferry's First and Best—\$6.50 per 100 lbs.
American Wonder—\$8.00 per 100 lbs.
McLean's Little Gem—\$7.00 per 100 lbs.
McLean's Advancer—\$6.50 per 100 lbs.

FLOWER SEEDS—Continued

Scarlet Flax [see <i>Linum</i>]	Sweet Peas invincible scarlet..... 5
Scabiosa [see <i>Morning Bride</i>]	" " black..... 5
Stock, Brompton..... 10	" " white..... 5
Stock, double German ten week..... 20	" " mixed..... 5
Suu Flower, large Russian..... 5	Sweet Sultan, double purple..... 5
" double..... 5	Tagetes [see <i>Marigold</i>]
Sweet Peas "Miss Blanche Ferry"..... 5	Tassel Flower, scarlet..... 5
" purple..... 5	" yellow..... 5
" King Indigo..... 10	" mixed..... 5
" striped..... 5	Whitlavia, large flowered..... 5
" painted lady..... 5	Xeranthemum mixed..... 10
" Princess Beatrice..... 10	

Half-Hardy Annuals include such annual plants as from being natives of warmer climates, or of slow development, need to be forwarded in the spring by means of artificial heat, either in green houses, hot-beds, or the dwelling house in order to come to perfection.

CULTURE—Notice in the description of the varieties, the soil best suited to that sort. Fill shallow boxes to within one-half inch of the top with light, friable earth, the composition of which is suited to the wants of the particular plant. The earth should be in such a condition of moisture, that when pressed together in the hand it will form a ball, that will retain its shape, but will fall into fine earth again upon being pinched or struck. Press this down evenly and firmly, making the surface as smooth as possible, and then form grooves with a short, thin board, in the same way as directed for hardy annuals, taking great pains, that the grooves are not too deep, drop in the seed and cover with earth, which should be pressed evenly and firmly over the seed, now water thoroughly but carefully so as not to wash out the seed, and keep in a warm place in the full light, but not where the sun will shine directly upon them so as to dry off the surface too rapidly and necessitate too frequent watering. Watch them carefully, watering as seldom as possible, but keeping the soil *always moist, but never wet*. As soon as the plants begin to appear, place in full sunlight and give plenty of air, taking great care that the plants never suffer from want of sufficient water or from an excess of it. When the plants have made three or four leaves, or begin to crowd each other, remove to other boxes or pots, and set in the open ground as soon as danger of frost is over. Most of the varieties of both hardy and half-hardy annuals mature so rapidly that better results will be obtained if several sowings at different dates are made, thus securing a succession of bloom.

Abronia, mixed..... 10	Nycteria capensis..... 10
Acroclium, white..... 5	" " mixed..... 10
" rose colored..... 5	Swan River Daisy [see <i>Brachycome</i>]
Anagallis, fine mixed..... 10	Perilla, atropurpurea laciniata..... 5
Brachycome, mixed..... 10	Verbena, mixed..... 5
Browallia, fine mixed..... 10	Zinnia, double scarlet..... 10
Lobelia erinus, Blue King..... 10	" " purple..... 10
" Queen of Whites..... 10	" " deep purple..... 10
" Crystal Palace..... 10	" " orange..... 10
Mimosa (see <i>Sensitive Plant</i>)	" " white..... 10
Mimulus moschatu (Musk Plant)..... 10	" " yellow..... 10
" punctatus (Monkey Flower)..... 10	" " violet..... 10
" double..... 25	" " dark violet..... 10
Monkey Flower [see <i>Mimulus</i>]	" " mx. very fine..... 10
Musk Plant [see <i>Mimulus</i>]	" " mx. striped or zebra..... 13
Nierembergia gracilis..... 10	

Hardy Biennials or Perennials are such plants as do not bloom, or blossom perfectly, the first season, but live through winter with little or no protection, and come into full bloom the second season, after which the biennials die, while the perennial continues to live and bloom from year to year. This class includes many of our finest flowering plants, yet they are often neglected because not blooming the first year from seed; but this long waiting for bloom may in many cases be avoided by treating the seed as half hardy annuals and starting them sufficiently early to form large strong plants by the time they can be set out in the spring. When this is not done they may be sown in beds as directed for hardy annuals, and the plants set out in the fall at suitable distances.

Adlumia, cirbosa..... 10	Pansy, sky blue..... 10
Agrostemma, coronaria..... 5	" gold margined..... 10
Briza, maxima..... 5	" mahogany colored..... 10
" gracilis..... 5	" violet, white edged..... 10
Canterbury Bell, double white..... 10	" extra choice mixed..... 10
" " blue..... 10	" fine mixed..... 5
" " mixed..... 10	Peas, perennial or everlasting, rose..... 10
" " single mixed..... 5	" " white..... 15
Catananche, mixed..... 5	" " mixed..... 15
Chrysanthemum mixed..... 5	Lathyrus latifolius [see <i>Peas</i>]
Columbine, mixed, double..... 10	Pink, double diadem..... 10
Forget-me-not, Myosotis Alpestra..... 10	Primrose, low white evening..... 10
Foxglove, Ivory's new spotted..... 5	" showy evening..... 5
" fine mixed..... 5	" evening (Guthera gigantea)..... 10
Hollyhock, mixed double..... 5	Primula sinensis fimbriata, choicest mixture..... 25
" double pure white..... 15	Pyrethrum roseum..... 10
" lemon yellow..... 15	Quaking Grass [see <i>Briza</i>]
" Charter's fine mixed..... 15	Rose Champion [see <i>Agrostemma coronaria</i>]
Honesty or Satan Flower..... 5	Stock Emporor or perpetual..... 15
Lobelia, Queen Victoria, scarlet..... 15	Sweet William, pure white..... 10
" Cardinals (Cardinal Flower)..... 10	" " black..... 10
Lythrum, rose colored..... 5	" " fine mixed..... 5
(Etiopis) [see <i>Primrose</i>]	" " mixed double..... 10
Pansy, Emperor Williams..... 10	Valerian, Greek..... 5
" King of the Blacks..... 10	Violet, cornute alba..... 10
" Odiar or large stained..... 15	" " lutea grandiflora..... 10
" pure yellow..... 10	" " Mauee Queen..... 10
" variegated..... 10	" " Purple Queen..... 10
" white..... 10	" " sweet scented English..... 10
" Bugnots, large flowering..... 50	
" purple, white edged..... 10	

Half-Hardy and Tender Perennials are such as must be kept over winter in the cellar or green-house. The seed may be treated like half-hardy or tender annuals.

Nine-tenths of the failures in flower culture comes from improper treatment of the seeds and young plants, and we urge every purchaser of our seeds to keep in mind the following golden rules for sowing flower seeds:

- Make the surface as fine and smooth as possible.
- Do not plant any of the seed when the ground is at all wet.
- Cover each lot of seed to a uniform depth which should never be more than three or four times the diameter of the seed.
- Press the soil firmly over the seed.

Plant in rows so that the young plants can be easily seen, and pull up all the seeds which spring up between the rows the day they appear, but do not pull plants out of the rows until you are sure they are weeds.

Carnation, mixed double..... 10	Feverfew, [see <i>Pyrethrum</i> and <i>Matricaria</i>]
" extra choice double..... 25	Gynerium (see <i>Paupus grass</i>)..... 10
" mixed..... 25	Paupus Grass, Gynerium..... 10
Calceolaria, finest hybrid mixed..... 25	Pink, double China..... 5

Pink, Heddewig's double..... 10	Maurandia, fine mixed..... 10
" double Japan..... 10	Petunia, Countess of Elmsmore..... 10
" double imperial..... 5	" finest striped and blotched..... 10
Pyrethrum aureum..... 10	" fine green edged varieties..... 20
Salvia, splendens compacta..... 10	" new fruited..... 20
Tree Cypress, mixed..... 5	" nyctaginiflora..... 5
Ipomopsis (see <i>Tree Cypress</i>)	" choicest mixed..... 20
Verbena, suammethi mixed..... 10	" large flowered mixed..... 10
" extra choice mixed..... 20	" fine mixed..... 5
" fine mixed..... 10	" double mixed..... 20
" mixed..... 10	Smilax myrsifolium asparagoides..... 15
Calampelis scaber..... 10	Snadragon, Antirrhium najas Delila..... 5
Cobaea, Mexican or climbing..... 10	" Autirrhium album..... 5
Commelina, mixed..... 5	" " brilliant..... 5
Cyclamen, Pericum mixed..... 25	" " fine mixed..... 5
Dahlia, finest double mixed..... 15	Solanum pseudo capsicum..... 10
" " single..... 15	Wall Flower, Tom Thumb new golden..... 15
Daisy, mixed double..... 15	" " early brown..... 5
Gourd, mixed ornamental..... 10	" " mixed double..... 10
Lophospermum scandens..... 10	

Tender or Green House Annuals are such as being natives of hot climates, not only require a longer season, but also need to be protected from the cold winds and rains, which are so frequent in our climate, and so cannot be set out of doors except during the hot months.

CULTURE—This is much the same as that of half-hardy annuals, except that the seeds are often so fine that they cannot safely be covered with earth, but are simply pressed into the soil and the utmost pains must be taken that they do not become too dry or over watered. A single hour of bright sunshine will often so dry the surface as to kill the seeds which are just starting, and on the other hand a slight excess of water will cause them to rot, and it is to mistakes or neglect in watering that nine-tenths of the failures with this class of seeds are due.

Alonsoa, fine mixed..... 5	Gourd bottle..... 10
Baloon Vine..... 10	" Corsica..... 10
Bartonia, golden..... 5	" siphon or dipper..... 10
Calandriua, grandiflora..... 5	" powder horn..... 10
Castor Bean, Ricinus tricolor..... 5	" Hercules' club..... 10
" " mixed..... 10	" mixed ornamental..... 10
Canary Bird Flower..... 10	Hyacinth Bean, purpurea..... 10
Canna indica..... 10	" " alba..... 10
Castor Bean, Ricinus sanguineus..... 10	" " giganteus..... 10
Cockscomb, mixed dwarf..... 10	" " mixed..... 10
" Celosia, new Japan..... 10	Ice Plant..... 5
" " variegated..... 10	Indian shot (see <i>Canna Indica</i>)..... 5
Cypress Vine, scarlet..... 5	Mesembrythemum [see <i>Ice Plant</i>]
" " rose..... 5	Ipomea, cocinea Star Ipomea..... 5
" " white..... 5	" Boua Nox (Good Night)..... 5
" " mixed..... 5	" grandiflora (Moon Flower)..... 25
Datura, Wrightii..... 5	" " limbata..... 5
" chlorantha, fl. pl..... 5	" " elegantissima..... 5
" fastuosa alba, fl. pl..... 5	" " rubra ceonileia..... 10
" " mixed..... 5	" " fine mixed..... 5
Globe Amaranth, Gomphrena, globosa, purple..... 5	" " quamoclit, (see <i>Cypress Vine</i>)..... 5
Globe Amaranth, white..... 5	Portulaca, alba..... 5
" " flesh colored..... 5	" " aurea..... 5
" " orange..... 5	" " straiata..... 5
" " striped..... 5	" " caryophylloides..... 5
" " mixed..... 5	" " fine mixed..... 5
Gnaphalium, everlasting..... 10	" " double mixed..... 15
Godetia, Velmoria's splendidi..... 10	Rhodanthe, Manglesi..... 10
Gourd, orange (mock orange)..... 5	" " maculata..... 10
" " Japanese nest egg..... 5	" " alba..... 10
" " apple shaped..... 10	Ricinus (see <i>Castor Bean</i>)..... 10
" " pear shaped (<i>Pirit annulata</i>)..... 10	Salpiglossis, fine mixed..... 10
	Salvia Roemeriana..... 10

Our Specials in Flower Seeds

SWEET PEAS

The Extra Early Blanche Ferry—The earliest Sweet Pea; in full bloom two weeks before any other sort. Of dwarf habit; flowers profusely the whole season. The wings are nearly white; the standard is deep rose pink becoming more intense near the base. Sold only in packets. Price per packet, postpaid 10c.

Katherine Tracy—Exquisitely beautiful in color, perfect in form, unsurpassed in size. The color is soft but brilliant pink, of precisely the same shade in wings and standard, retaining its brilliancy to the last, burning and fading less than any other variety. The stems are strong, exceptionally long, and bear two or three blossoms each, so gracefully poised that they form when cut EXQUISITE BOUTIQUETS, that excite the liveliest admiration wherever seen. Sold only in packets. Price per packet, postpaid 10c.

SWEET PEA MIXTURE—Consisting of the following varieties

25 Cents Per Packet, Postpaid

Adonis, deep carmine rose—	Gaiety, the standard white; striped and flaked with bright, rosy lilac; the wings delicate blush—
Apple Blossom, pink and blush—	Indigo King, very rich purple maroon—
Blanche Ferry, pink and white—	Invincible Scarlet, bright scarlet—
Blushing Beauty, soft pink suffused with lilac; a superb flower; a distinct and lovely variety.	Invincible White, a fine strain of pure white—
Boreaton, crimson purple, very dark—	Lemon Queen, blush and lemon—
Butterfly, pale gray, with distinct porcelain edge—	Lottie Eckford, pale mauve standards, wings white edged with porcelain—
Captain of the Blues, bright purple and pale blue—	Mrs. Eckford, white, delicately shaded with primrose—
Cardinal, crimson scarlet—	Mrs. Sankey, white, of perfect form and large size; a profuse bloomer—
Countess of Radnor, lavender—	Primrose, pale primrose yellow; novel and distinct—
Dorothy Tenant, dark mauve—	Senator, Chocolate and creamy white—
Emily Henderson, clear pure white; very early flower—	Splendor, coppery crimson; suffused with rosy pink.
Fairy Queen, white; flushed and feathered with pink—	Venus, Salmon buff, the standards delicately shaded rosy pink.
Firefly, a self colored, intense, glowing crimson—	

GRASS



SEEDS

In the following list we have briefly described the various best grasses for general use. Our limited space does not permit extended descriptions and large illustrations, but the seeds we offer are of *best grades only and extra clean*. The prices are subject to variations according to the market. *Special prices will be quoted at any time by mail.*

Extra Fine Mixed Lawn Grass.—Incomparably the best mixture known for lawns and parks in this climate, and when cut frequently and watered well immediately after, will furnish a handsome, velvety lawn for years, requiring no re-sowing. The use of our *Lawn Top Dressing* in the spring or fall adds greatly to a good lawn. Per lb., 20c.

Orchard Grass, or Cock's Foot.—One of the most valuable grasses on account of its quick growth and valuable aftermath. It is ready for grazing two weeks sooner than most grasses, and when fed off is again ready for grazing in a week, and will continue green when other grasses are withered by dry weather. It is palatable and nutritious, and stock eat it greedily when green. It has a tendency to grow in tufts, and so does better if sown with clovers, and as it ripens at the same time the mixed hay is of the best quality. For grazing it has no equal, and should be used more than it is. When sown alone, 25 lbs. per acre; if sown with clover, half that amount. It is perennial, and will last for years. Per lb., 14c; 100 lbs., \$12.25.

Italian Rye Grass.—Is more of an annual, and is good in mixtures for hay crop. It is of quick growth and valuable for sheep pasturage. Per lb., 10c; per 100 lbs., \$8.00.

Herd, Red-Top Grass, or Bent Grass.—Is most largely used for wet lands, but does well in almost any soil, moist or dry. It makes good hay or pasture, and is much used in mixture with timothy and clover. Sow 30 lbs. per acre. Per lb., 10c; per 100 lbs., \$8.00.

Kentucky Blue Grass.—Is the finest and best of all grasses when used separately or in mixtures for general lawn purposes, and is invaluable for a pasture grass, as it stands so much tramping without being killed out. Use 30 to 40 lbs. per acre. Per lb., 15c; 100 lbs., \$12.00

Sweet-Scented Vernal.—One of the earliest grasses in spring, and latest in autumn, and more fragrant than any other grass. Valuable to mix in pastures with other grasses on account of its earliness, and it exhales a delightful fragrance when in bloom. About 30 lbs. to the acre. Per lb., 30c.

Johnson Grass.—This is one of the most valuable forage plants; very popular in the southern states, and will come into universal use in all parts of the United States when known. It is perennial, a rapid grower, very nutritious, being eagerly devoured by all kinds of stock. Comes early in spring, grows until the frost cuts it down in the fall; stands the drought better than any grass, and having long, cane-like roots, which penetrate the soil for moisture; superior both as a grazing and hay grass. 30 lbs. per acre. Per lb., 15c.

Tall Meadow Oat Grass.—This grass is early and very luxuriant. It makes fine pasture and good hay. Can be cut often. It is also valuable to plow under for soiling. Sow 30 to 40 lbs. per acre. Per lb., 20c; per 100 lbs., \$18.00.

Timothy.—It is very largely grown for hay crop in northern climates, and is fine when sown with Red Top and clover. Sow 10 lbs. per acre. Per lb. 6c; per 100 lbs., \$5.75.

Meadow Fescue, or True English Blue Grass.—(*Festuca Pratensis*.) One of the most valuable pasture grasses. Its long and tender leaves are much relished by stock of all kinds. In some southern states it is called Randall grass, sometimes Evergreen grass. Sow in spring or fall at the rate of 30 to 40 lbs. per acre. Per lb., 16c; 100 lbs., \$12.00.

Hungarian Grass.—Is a very valuable forage plant for light, dry soils. It withstands drought and remains green when most vegetation is parched. Sow and cultivate as for Millet. Per lb., 8c; per 100 lbs., \$6.00.

Common Millet.—Can be sown broadcast in the spring of the year for hay; 30 to 40 lbs. to the acre. If for seeds sow in drills; 20 lbs. to the acre. It produces largely as an annual early crop. Per lb., 8c; per 100 lbs., \$5.00.

German or Golden Millet.—Is not quite as early as the above, but yields more largely. Per lb., 8c; per 100 lbs., \$5.00.

English or Australian Rye Grass.—Is a perennial much like the English Blue Grass, and is very valuable for either pasturage or for hay, and well adapted to moist land. Sow for hay 30 lbs. per acre. Per lb., 10c; per 100 lbs., \$7.50.

Red Clover.—(Two varieties, large and medium.) Both succeed well here, especially in our bottom lands and deep soils. Per lb., 11c; per 100 lbs., \$10.50.

Crimson Trefoil, or Scarlet Clover.—Grows about one foot high. Dark roots, long leaves, and blossoms of deep red. It makes good hay, and will give two or three cuttings each season. Lb., 10c; 100 lbs., \$9.00.

Alfalfa.—Produces enormous crops, and is cut many times during the season for hay. It roots deeply, keeping fresh and green through our long, dry season, and is the most valuable and profitable of all crops for abundance of feed. If in the fall, sow early enough to get a little root before a frost. It can be sown again in February and spring months. Per lb., 10c; per 100 lbs., \$9.50.

White Dutch Clover.—Grows low, spreading, and very fragrant, and is most excellent for lawns and pasture. Per lb., 25c; per 100 lbs., \$18.00.

Espersette.—(*French Sanfoid*.) This plant is of a lignumvitus character, having many stems two and three feet long. Smooth and tapering, with many long, oblate leaflets in pairs, and spikes of variegated crimson flowers. The root is perennial, of a hardy, woody nature. The plant flowers early, and can be repeatedly cut, thus furnishing a great abundance of most nutritious food through the long dry and heated seasons, and requiring no irrigation. Stock will eat it with impunity, without danger of bloat, as in alfalfa. The seed and seed pods are said to be more nutritious than oats. The plant does best in calcareous and gravelly soils, and elevated slopes and arid regions, where other vegetation fails. It will, however, not succeed in wet or low lands where there is no drainage. From 30 to 40 lbs. are required for an acre. 1 lb., 12c; 100 lbs., \$10.00.

Alsike, or Swedish Clover.—This variety is fast gaining great popularity. It is the most hardy of all the clovers; perennial. On rich, moist soils it yields an enormous quantity of hay or pasture, and may be cut several times in a season. But its greatest value is for sowing with other clovers and grasses, as it forms a thick bottom, and greatly increases the yield of hay, and cattle prefer it to any other forage. The heads are globular, very sweet and fragrant, and much liked by bees, who obtain a large amount of honey from them. Sow in spring or fall. 1 lb., 13c; 100 lbs., \$12.00.

Barley, Common.—Barley succeeds best on lands more sandy and lighter than those adapted to wheat. It is sown in the spring, and can be grown further north than any other grain. 1 lb., 2c; 100 lbs., \$1.75.

Rye, Fall or Winter.—The time for sowing is from the middle of August to the last of October. One plowing is given, and the seed sown broadcast at the rate of one and a half bushels per acre, and dragged in. Harrowing and rolling in the spring are recommended. If cut before fully ripe the grain makes more and better flour. 1 lb., 2c; 100 lbs., \$1.50.

Japanese Buckwheat.—This variety excels them all. Will yield fully twice as much on the same ground as any other, and it ripens one week to ten days earlier, stands up better, and makes better flour than any other kind of Buckwheat. 1 lb., 5c; 100 lbs., \$3.50.

Spring Vetches, or Tares.—(*Vicia Sativa*.) A species of the pea grown extensively in England, and to a considerable extent in Canada, for stock. Culture same as field peas, two bushels per acre. 1 lb., 5c; 100 lbs., \$3.50.

Flax.—(*Linum usitatissimum*.) Sow late enough in the spring to avoid frost, and early enough to secure the early rains. A fair average quantity of seed to be sown on an acre is one-half bushel, when cultivated for seed; if for the fibre, a larger quantity should be sown. Cut before quite ripe, and if the weather be dry, let it lie in the swath a few hours, when it should be raked and secured from the weather. Thresh early in the fall and in dry weather. 1 lb., 7c; 100 lbs., \$6.00.

Rye, Spring.—Although this grain is often planted by farmers, especially for paper makers, who prefer it to any other, its principal value is as a "catch" crop to sow where winter grain has failed. The straw is shorter and stiffer than that of the winter variety, and is always easily secured, while the grain, although smaller, is of equal value. 1 lb., 2c; 100 lbs., \$1.75.

Buckwheat, Common.—Buckwheat should be sown about the middle of June, broadcast, at the rate of from one to three pecks per acre. The average yield is from 25 to 30 bushels per acre. It should be threshed as soon as dry, on the ground or barn floor. If allowed to stand in mass it quickly gathers moisture. 1 lb., 4c; 100 lbs., \$2.75.

Swiss Field Peas.—A new variety of great merit; we believe in time they will take the place of all others, as the bugs do not bother them. 1 lb., 5c; 100 lbs., \$3.50.

Buckwheat, Silver Hull.—This improved variety is much better than the old sort. It matures sooner, and yields double the quantity per acre. The flour is said to be better and more nutritious. 1 lb., 4c; 100 lbs., \$3.

Field Peas.—May be sown broadcast or in drills; about three bushels per acre. 1 lb., 3c; 100 lbs., \$2.00.

Poultry AND SUPPLIES

Advantages of Incubators

We wish to call your attention to the use of Good Incubators and Brooders, and endeavor to set forth the great advantages of their use.

Hatching and raising chicks by artificial means is no longer an experiment, but is so fast gaining public favor that the time is not far distant when no one will think of raising poultry, even for their own use, without having an Incubator and Brooder, for with their assistance the task is made a pleasure, as they never leave the nest or break the eggs, or run down the little chicks trailing them through the wet grass. You need never use any of those endearing words so fresh to mind of those who have had experience with a dozen or more broody hens that want to sit today, and tomorrow are out of the notion. But on the other hand things work just like this: If you have a good Incubator, one that you can trust, one that you know is sure and positive in its workings, that will remain the same, day and night, no matter if a change of 30 to 40 degrees takes place in the outside temperature every twelve hours. With such a machine you can commence hatching at any season of the year. When you are ready the machine is ready.

You place your eggs in this machine, stand the machine where you like—anywhere, from the garret to the cellar, woodshed or barn—as long as the wind does not blow the lamp out, and it will do its work, providing you will visit it once in twelve hours, in the morning to turn the eggs, again at night to turn the eggs and fill the lamp with oil. The balance of the time you may spend as far from the Incubator as you choose to go, and if the machine in question is *one of our make*, we will be responsible for the well-being of your eggs, and assure you that in due time you shall be rewarded for your labor by finding the machine filled with strong, healthy chicks.

Advantages of Brooders

Now we will endeavor to outline the work of a Brooder. This Brooder is constructed after the same plan as the Incubator, having a regulator that will perfectly control the heat safe and sure. Being adjustable, it can be set to any desired degree of heat, this being of importance, for as the chicks grow older they require less heat. It is supplied with top heat, so as to warm the little chicks' backs, as the old hen does. We never saw a chick that was cold try to sit on its mother's back, consequently we do not like bottom heat Brooders. It is also roomy, light and cheerful.

A Brooder always warm and set to receive the chicks at any time they may come in. They are not compelled to follow the old hen and beg her to sit down to allow them to get warm. When the weather is fair we will allow them to run out in the yard; on cold, rainy or snowy days we keep them in the shelter, and at night they are all in the Brooder. Aside from this, if you will put the water and feed in the trough and clean the Brooder occasionally, they will take care of themselves. Now compare this task, if task it may be called, with the worry, toil and anxiety caused by seven or eight old hens from the day you set them till the chicks are weaned.

Now these are not all the advantages. With the Incubator and Brooder you have 100 chicks, all of one size, while with hens you will seldom get more than one or two to set at the same time, consequently your chicks are of all sizes and sorts, and the large ones trample over the small ones and they get no food.

Our Guarantee

We sell our machines strictly on their merits, and should you decide to deal with us, it will ever be the height of our ambition to see that you will get value received for every dollar paid to us, or in other words, if machines do not do as represented herein, when directions are followed, we positively agree to refund all money paid us, on return of machine, and we furthermore insist that any person having one of our machines that does not work as represented, notify us at once, and the matter will be righted. We do not care to sell the reputation of our machines in an entire neighborhood for the price of one machine, as many others have done.

Again, note the advantage of being able to hatch and raise chickens in the fall and winter, so as to have them ready for market from the holidays to spring, when they will bring us double the money they would in the summer or fall.

What We Claim

After many experiments and careful and diligent study, we feel confident we have something to offer to the public that will do actual service, and not prove a source of annoyance and expense for its purchasers, built for durability and economy.

This machine has been and is being tested every day under the most trying circumstances. Its regulator will stand a test of 50 degrees change in the outside temperature within six hours' time.

As to moisture and ventilation, we feel sure that our machine is not excelled, having never failed to give the best of satisfaction.

We keep machines constantly running at our store, and would respectfully urge parties who contemplate buying an Incubator to come and see for themselves; see the chicks hatching, see if they look strong and healthy or weak and puny.

Description of Incubator

The cases of our machines are all made from first-class Oregon woods, hand finished, with neatly designed turned legs, finished in natural wood color, with two coats of hard oil finish. The cases are all double throughout with a dead air space of one-half inch between each wall, making our machine much less susceptible to outside changes as to heat or cold than any other incubator we have ever seen.

In addition to this all our machines, except the Little Gem, are lined with best quality of asbestos, thus requiring less heat to run them than other machines. The Little Gem is lined with a superior quality of building paper.

All have double glass doors with air space between glass.

Supply of Heat

On this point we will dwell at some length, as we consider it one of the most important in the construction of an Incubator. Two very important features confront the manufacturer of an Incubator if he wishes to be successful.

First—Equal distribution of heat over the entire surface of the egg tray must be obtained.

Second—In order that an automatic regulator may control the temperature in the chamber, the heating apparatus must be so constructed that the volume of heat can be increased or diminished almost instantly. If otherwise, the temperature will always be at variance, either too low or too high.

Tank of Water a Failure

In trying to overcome these difficulties and obtain the desired results, parties have made many fruitless experiments. One, a tank covering the entire top of the machine, and were obliged to abandon for two reasons: First, such a tank, (as can be plainly seen), heats the eggs directly under its center more than those at the outer edges,

as the body of the heat is in the center of the tank. Second, the quantity of water held in such a tank cannot be controlled to any certainty, whatever, as the heat will store in the water and continue to raise the temperature in the egg chamber long after the regulator has closed down the lamp, and thus cause the regulator to hold down the lamp so long that when the temperature in the egg chamber does commence to fall, the water has cooled to such an extent that before the lamp can again heat it, the temperature has fallen far below the hatching point.

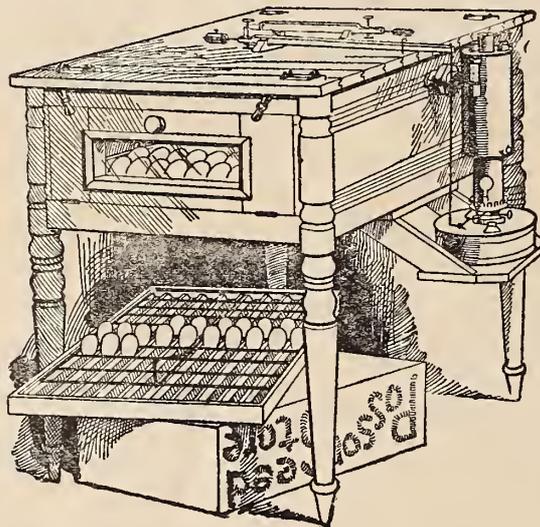
Hot Air Machine a Failure

Another, a hot air machine, which after many long and tedious experiments, has also been abandoned, except on a very small scale, the difficulty being unequal distribution. Hot air can only be conducted by draught, and draught has a tendency to cool heated air. Hence when the pipe of an ordinary stove can be heated as hot air where it enters the flue as where it is attached to the stove, then hot air can be successfully used in Incubators, and not before.

Construction of Our Heaters

Our heaters are constructed of $\frac{3}{4}$ inch iron pipe, same as used for water, gas and steam, and it is useless for us to speak of their durability, as that is unquestionable.

The ends of the pipe of this heater project out through the case at one end and are attached to a small boiler. This boiler is made from a high grade of planish copper, and is of superior design so as to produce the most heat possible from the amount of oil consumed. A lamp is situated under this boiler and is connected with the same by a short tin flue, which conducts all the heat from the lamp to the boiler.



We Sell Incubators on the Installment Plan

This little boiler and pipe heater is filled with water, the amount of which, in a hundred egg machine, is about four pints. The action of the heat from the lamp causes the water in the heater to circulate very rapidly, thus forming a running stream of hot water flowing through this pipe heater to every corner, and along each side and end of the entire egg chamber, no matter how large or how small, and the extremely small amount of water used makes it perfectly controllable by an automatic regulator.

Regulation of Heat

We claim to have a machine with an automatic regulator, that can be set to hold or regulate the heat at any given point, and when once set will positively govern the heat at that point as long as oil is kept in the lamp, and furthermore, that it will do this against a change in the outside temperature of fifty degrees in the short space of six hours' time.

If the operator will trim the lamp and fill it with oil once each twenty-four hours, put it in place and turn up the wick to a good flame, as near the same each day as practicable, no matter how hot or how cold the day may be, the regulator will do the balance.

This regulator, or heat governor gets its motive power from a hollow brass disk situated inside the egg chamber, and is so sensitive to heat, that a single degree will raise or lower the flame of the lamp. This disk is hung in an iron frame from the top of the case. A long iron pin rests on top of the disk and passes up through the case; on this pin rests a set screw in a long lever extending to the lamp. The expansion of this disk to the one-hundredth part of an inch will close the lamp down, or the contraction of the same amount will raise it to a full flame.

Now, so far as certainty of the workings of this regulator is concerned, we do not hesitate to say that it is more positive than the best clock that ever was made, as clock springs and cords do break and wear out, but this regulator has nothing in its make-up that can break or wear out. Just as certain as the heat raises, so certain must this disk expand, and as certain as this disk expands, so certain must the lamp flame go down; or should the disk contract the least particle, which it will do the instant the temperature falls the least particle, up goes the flame to whatever degree is necessary to regain the temperature in the egg chamber.

Once Adjusted Sufficient

We wish also to impress upon the minds of our readers that this regulator does not require continual watching and readjusting from time to time to accommodate different stages of the hatch, changes of temperature between day and night, winter or summer, or when the chicks begin to come out, etc., but when once adjusted will remain so till changed, and will control the heat not only through one hatch, but through one hundred hatches if desired.

A Safety Regulator

Besides the regulator just described, we have patented a safety attachment, so that if by carelessness or accident the operator should neglect to connect the regulator to the lamp, the eggs will not necessarily be spoiled. This safety regulator consists of a damper in the pipe, which works automatically, as does the lamp regulator, and as soon as the egg chamber becomes at over 102° this opens and throws the heat away from the boiler immediately, thus preventing any possible over heating. We have carefully tested this safety regulator beside the patent valves, etc., of other leading machines, and do not hesitate to pronounce it far more reliable, in that it always checks the heat.

Our Egg Trays Superior

The egg turner that we use turns the egg over endwise, and always keeps the large end slightly elevated. We avoid all the inconvenience of having chicks pip and try to get out of the small end of the shell, which will always occur if the small end of the egg is elevated for any length of time during incubation, and chicks so situated almost always fail to get out alive.

Every egg is perfectly turned, no matter how large or how small. It is not necessary in order to turn the egg to move the tray from its position in the machine, but simply open the door, place your hand on the handle of the turning rack, give it a push or pull, as may be required, and all the eggs turn over at once, and you close the door and do not expose the eggs to the cold air, or allow all the heat to escape from the machine. When the chicks commence to pip the shell, this turning rack is removed and the tray made amply large for the hatching chicks.

Brooders

Upon this subject too much cannot be said. Many persons seem to think that it is immaterial as to whether they have a Brooder or not; they seem to think, that all they have to do is to get an incubator and hatch the chicks out, and they will grow anyway. But permit us to say, that such an idea is a great mistake. Many others say: "Oh, we can make a Brooder good enough for us," but this is another mistake, for if they could make a Brooder good enough for them, they could make a Brooder good enough for any one else; as a chick that they may hatch will require just the same care as that of anyone else, and if they could do all this, they could also make an Incubator. If we were to have to put up with either a poor Incubator or a poor Brooder, we would say, by all means give us a poor Incubator and a good Brooder.

We would then have the satisfaction of knowing that we could raise what chicks we did hatch for if there is any one thing more than another that will discourage a person in the poultry business it is to hatch a fine lot of chicks and have them all die in the Brooder; probably smother them all in one night, and permit us here to give a word of warning, and that is, if you don't want to meet with such success as this, never trust your young chicks in a Brooder of any kind that has no regulator, for if you do, you will most likely find them as above stated sooner or later.

It is of the most vital importance, that you have a good Brooder; one that can be set at a certain temperature, and that will positively remain so, no matter how many chicks crowd into it, or how much the weather may change, with this kind of a brooder you feel safe; you know if a change comes in the outside temperature your Brooder is able to meet it, and your chicks will be properly cared for, and can not be over-heated or chilled.

Our Brooders are all heated in the same manner as our incubators, which produces an even temperature over the entire space, a matter which must not be overlooked, as little chicks are very sensitive to cold and heat; they will not be slow in finding it out, if there be a warm corner or end in the Brooder; every one will crowd for that spot, and thus crowd each other to death. But if the Brooder be heated evenly this will not occur, as there will be no inducement to crowd. Our Brooders are also supplied with the same kind of regulators as the incubators, just as sensitive to heat or cold, and can be adjusted to any degree that may be desired, and will remain so until changed. They are large and roomy, low down to the floor so as to be easy of access by the little chicks; well built and neat looking.

Bear in mind, that all our Brooders are supplied with adjustable self regulators, an item which you can not afford to overlook.

Advantages of Early- Hatched Chicks . . .

Permit us to urge upon the minds of all who would succeed with poultry, the advantages of early hatching, whether your object be eggs or market poultry. Herein lies the secret of your success. If it be market poultry you have only to stop for a moment and compare your business with that of a market gardener, and the matter needs no further explanation. Who is it that get the fancy prices, the gardener who is first in market with a bushel of new potatoes, or he, that comes when the market is glutted? Is it not the same with your poultry? We think yes, and if the object be eggs, is it not virtually the same?

A chick that is hatched in May or June will seldom if ever lay before February or March, while one that is hatched in December, January, or February, will commence laying in July, August or September, and continue on all through the winter if properly cared for. And is it not a fact, that the price of eggs commences to rise about the last of July or the first of August, and continue raising until after the holidays, and then gradually decline again, and does not this demonstrate the fact that in order to get the best prices for eggs we must hatch our chicks early? Most assuredly we say yes.

Without the aid of an Incubator and Brooder we will admit that this would be quite a task, but with their assistance it can easily be done, as the Incubator will hatch them as well in winter as in summer, and a good Brooder will keep them comfortable no matter how cold it may be, and if we have a house just sufficient to shelter them from wind and storm, in which to place the Brooder, and have space enough for the chicks to come out and eat, drink and pick around for a few moments, and then run back in the Brooder, they will grow and do fine if rightly attended, and when a fair day comes allow them to have outside range, but always in an inclosure, so that you may always know just where to find them in case a storm comes up.

Are Incubator Chicks Healthy?

We often have these questions asked us, "do you think that chickens hatched and raised with incubators and Brooders grow as fast and do as well, and will the pullets lay as early as those hatched and raised with hens?" While these questions seem to those, who have had experience with incubators and Brooders, somewhat amusing, they are nevertheless asked in good faith, and must be answered. The egg is complete within itself when laid, and all relations or connections so far as strength and vitality is concerned, are at an end, and the hen does not, as is supposed by some, impart any vitality, electricity or vigor in any way, shape or form to the embryo chick while sitting upon the egg or by brooding it after it is hatched, but merely applies the warmth of her body during incubation, that the germ in the egg may take life and produce a chick, and while brooding the chick she merely furnishes a shelter for it from the chilly blasts which it could not of itself endure, and when an artificial substitute for this work is instituted, there is no reason why the results should not be the same.

We have seen hundreds, yes, thousands, of chickens grown to maturity from Incubators and Brooders, that were as fine as any ever raised by hens.

Our Guarantee.

We guarantee all our incubators to hatch any egg of either the Grouse, Guinea, Chicken, Duck, Turkey or Goose, that could be hatched by the parent fowl, and that their regulators will control the heat within the hatching limit under any and all reasonable circumstances if directions are strictly adhered to. And in case of failure to do this, we will on return of machine in good condition, refund all money paid us for same. Our Brooders we also guarantee to be as herein represented.

Prices
AND
Terms

INCUBATORS

and other
Supplies

New 1896 Patent Incubator—One hundred and twenty egg capacity, \$25.00; payable \$12.00 down and balance in monthly payments to suit purchaser, or we will sell a limited number of these machines for \$20.00 spot cash to introduce them. Two hundred egg capacity, \$32.50; payable \$15.00 with order and balance in monthly payments to suit purchaser, or \$27.50 spot cash. **Special Prices on Larger Sizes.**

Little Gem Incubator—Only made in one size. Capacity, one hundred eggs. A smaller machine than our "New 1896 Patent" and lined with building paper instead of Asbestos, and it does not have our patent safety regular—otherwise just the same as above and guaranteed to be the best cheap machine on the market. Price \$15.00, payable \$9.00 cash with order and balance \$2.00 per month.

Brooders—One hundred chick capacity, \$7.00; two hundred chick capacity, \$12.00.

Egg Food—Sturtevant's Imperial, 25 cents per lb. Wellington's Improved, much the best, 25 cents per lb.

Bone Mills—Webster's No. 2 Improved Green Bone, only \$11.75. Mann's Green Bone, No. 1, \$5.75, with balance wheel, \$8.00. Wilson Bone Mill—can be used for BONES, Oyster Shells, Wheat, etc., only \$6.00.

Granulated Bone—\$1.40 per 100 lbs, or 2 cts per lb in small lots.

Bone Meal—Fine for little chickens—\$1.40 per 100 lbs, or 2 cts per lb in small lots.

Ground Oyster Shells—95 cts per 100 lbs or 1½c per lb in small lots.

Nest Eggs—White Glass, 29c per doz.

Creozone—A sure remedy for chicken lice, etc., 50c per quart.

Thoroughbred Poultry

We are in a position to furnish promptly eggs from the best yards on this coast. Also breeding pens or highest scoring birds, and in many cases for less money than you could buy direct, as we get the benefit of the profit on our goods we are constantly trading to the different breeders. **It will pay you to write us if you want to buy thoroughbred poultry or eggs of any kind.**

Below we name, with prices, a few of the most popular breeds. We guarantee all Eggs fresh and true to name; we also guarantee they will arrive at destination in good order and not broken; we ship to any State or Territory by express only.

Barred Plymouth Rocks, the Every-day Farmer's Fowl—More kept by Farmers than all other varieties combined. They are good layers, good foragers, attain good marketable size, are of good, honest color, good mothers, and last, but not least, make good eating. A setting of 13 eggs for \$2.00. Price of birds \$5.00 per pair; \$7.50 per trio.

Light Brahmas, Good Winter Layers—They are of solid and handsome appearance, with white plumage contrasted with brilliant black. Splendid winter layers, producing a great abundance of fine large eggs when other fowls have stopped. A setting of 13 eggs for \$2.00. Birds \$6.00 per pair; \$7.50 per trio.

Brown Leghorns, the Best Breed for Eggs alone—These are the most industrious and diligent foragers known, and are moreover the best breed where eggs are desired, no other breed yet introduced being equal to them in this respect. A setting of 13 eggs \$2.00. Price of birds \$5.00 per pair. \$7.00 per trio.

Indian Games have met with a greater boom from all the best Poultry journals of the country than any other new breed ever introduced, and have created the greatest sensation in the poultry kingdom ever experienced. The meat is wonderfully solid and firm, giving the birds great weight in proportion to their size. They are par excellence the table fowls of the country. Beautiful yellow skin and legs, deep full breast, without the prominence of the keel bone, they are fit for the table of a king. Indian Games are very tame, can be thoroughly domesticated and make the very best of fowls for the poultry farmer as well as the fancier. Eggs that will hatch prize birds, \$2.50 per setting of 13; 2 settings \$4.50. Fine cockerels, \$4.00 to \$6.00 each; pair, cockerel and hen, \$7.50; trio \$10.00.

Buff Cochins—They are excellent winter layers, good mothers and sitters. Cocks one year old should weigh ten to twelve pounds, and hens at same age should weigh eight to nine pounds. Prices: Single cock or cockerel \$3.00 to \$5.00; trio \$9.00. Eggs per setting of 13, \$2.00; per 26 \$3.50.

White Leghorns—The White Leghorns resemble the brown variety except in color. They are one of the most useful breeds. The white Leghorn lays a good sized egg—in fact larger in comparison to the size of the

fowl than any of the sitting breeds. Our stock having been bred from the choicest in the country, is unsurpassed. Single cock or cockerel, \$2.50; pair, mated for breeding, \$4.50; trio \$6.00. Eggs, for hatching, 7 for \$1.00; 15 for \$1.75; 30 for \$3.75.

Buff Leghorns—This valuable and wonderful egg-producing fowl is supposed to be a cross between the White and Brown Leghorns, and well resembles both its parents in everything except color. They are noted for their quick growth, extreme hardiness and wonderful laying properties. It has been said by some experienced poultry breeders, that the **Buff Leghorn hens under the most favorable conditions will lay 300 eggs in 365 consecutive days.** Their eggs are fair size, a pearly white color and extremely rich and nutritious. The young chicks mature very early and young pullets have been known to commence laying when only three months old. They are almost absolutely non-sitters, and will continue to lay day in and day out the whole season through, excepting a very short period when moulting their feathers. We will offer eggs for setting, from the best bred fowls the coming season as follows: 7 eggs for \$1.25; 15 for \$2.50; 30 for \$4.00. A few choice cockerels, each \$3.00; pair, cockerel and hen, \$5.00; trio \$7.00.

Prize White Plymouth Rocks—This new breed is a sport from the Barred Plymouth Rock, and promises to become even more popular than their "colored cousins." They breed truer to color than any of the new white breeds. Their large size, stately carriage and snow white plumage are the admiration of all. They are sure to be in great demand, and all who secure good breeding stock will find it a profitable investment. Being pure white they have no objectionable dark pin feathers. Prices: White Plymouth Rocks, single cockerel, \$4.00 to \$5.00 each; pair, cockerel and hen, \$7.50; trio \$10.00. Eggs for hatching, \$2.50 per setting of 13; \$4.50 for 26.

Prize Silver Laced Wyandottes—These beautiful birds are very hardy, easily raised, a fine table fowl, and prolific layers. Mature earlier than almost any other breed, and the hens make good sitters and mothers. Price of fowls. Single cock or cockerel, \$4.00 to \$5.00; trio, \$7.00. Eggs for hatching, \$2.00 per 13; \$3.50 per 26.

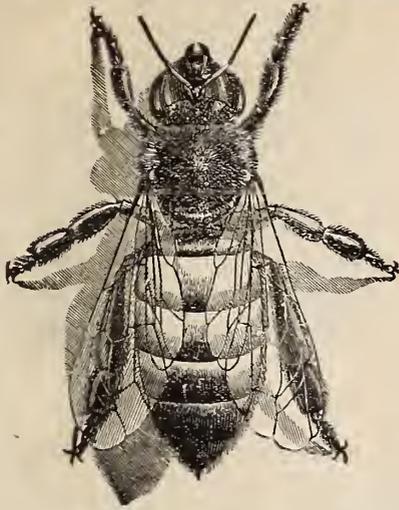
Black Langshans—Claimed by many to be the very best winter layers. They attain early maturity and grow to a large size. A very profitable and showy breed. Pair \$6.00, trio \$7.50.

Black Minorcas—The Minorcas are fast becoming the most popular breed of fowls in the West; they are fine layers of immense, white eggs. Pair \$6.00, trio \$9.00, eggs \$2.50 per 13.

Pekin Ducks—Without doubt the best laying duck known. Drake \$3.50, pair \$6.00, trio \$8.00.

Bronze Turkeys—They are good layers, and are the most profitable breed for market. Gobblers, 2 years, often weigh 30 to 40 lbs. Single Gobbler \$8.00, pair \$12.00, eggs \$5.00 per 13.

ROOT'S BEE SUPPLIES.



Statistics show over 14 car loads of honey shipped into the Northwest in one year. Why not you have some of this money? Don't shake your head until we show you how easy it can be done.

It will be worth your while to read this carefully.

1 Clark's smoker	50
5 No. 1 Dov. hives, complete	6 00
All shipped together, the price will be \$8.00. Full directions for putting the hives together are always included. For those who can afford it, we would advise, in addition to the above, the following tools, which will be found very convenient, if not quite indispensable:	
Daisy foundation-roller	\$ 15
Daisy foundation-fastener	1 00
1 spur wire-imoedder	15
5 lbs. medium brood foundation	2 40
1 qt. paint for hives	45
1 Alley's queen-trap	50
1 Porter bee-escape and board complete.....	35

Total additional supplies \$5 00
 These, added to Outfit No. 1, compose our Beginner's Outfit No. 2, and costs, complete, \$13.00. These goods go at third-class freight, and weigh less than 200 lbs., and the freight to most points in this and near-by states will be less than \$1.00 on either outfit.

How to Make a Start in Bees.

We advise you to buy black or brown bees in your own vicinity. Bees may be purchased in box hives, anywhere from three to five dollars per colony. They should then be transferred. To give you an idea of the necessary outfit, we have given a list above of the supplies needed. After you have gotten the hives in the flat, nail them up, put in the foundation, and then you are ready to transfer the bees. When they are nicely going on their new set of combs, you can then, if you prefer, Italianize them. From one colony, by good management, you can increase, by dividing, to four or five during the season. For directions, see Artificial Swarming, and Dividing, in the A B C of Bee Culture; cloth, \$1.25. Such a start can be made very cheaply, and at the same time give you valuable experience in the care and management of bees.

How to Italianize an Apiary.

There are several ways this can be done: First, by buying tested queens for every one of the colonies containing black or hybrid queens. The old queens should, of course, be removed, and the hive left queenless for a couple of days before the new mothers are introduced. This method, although the surest, is rather expensive.

A cheaper way, and the one we would generally recommend, is to buy untested Italian queens. Nineteen-tenths of the untested we send out will prove to be purely mated; and then, if the beginner loses his queen in introducing, the loss of an untested is only half that of a tested.

How to Prevent or Control Swarming.

You are not able to be at home, and we will assume that the rest of the folks are either afraid to tackle swarms or prefer to do it with as little labor as possible, when they do come out; or it may be you have an out-apiary. In either case you desire to discourage, and, if possible, prevent swarming, or so manage it that the swarming tendency will take care of itself largely in your absence.

Prevention by Caging the Queen.

In the production of comb honey there is only one reliable method, and that means so much work that the majority of bee-keepers do not practice it. Cage the queen of each colony over the brood-nest at the approach of the swarming season, and then in eight days cut out the queen-cells, and in eight days cut the cells again; but if you haven't a large apiary, and you have spare time nights and mornings, the labor will not figure much. The cutting-out of the cells alone or giving plenty of surplus room will help greatly to discourage, if not prevent swarming altogether.

The Clipped-Wing Plan, or the Easiest Way of Managing Swarming.

But most apiarists think it an advantage to let the bees swarm once; and as all their queens' wings are clipped, when the swarm comes forth the queen is caught in a Miller queen-catcher cage as she is crawling around in front of the entrance. The old hive is then removed to a new stand, and an empty one (several such should be kept in readiness) put in its place when the queen is put in front of the entrance caged. The bees, on discovering the absence of the queen, will soon return pell-mell to the old stand. The surplus chamber, if there was one on the old hive, is put on the new one now on the old stand.

This manner of catching the swarms is so little labor that the "women-folks" do not object to it since there is no handling of the swarm itself, no climbing of trees after it, and it is all done, practically, by catching the queen. The empty hive is easily handled, and the old hive need be moved but a few feet, when you will take care of it when you get home. You will also need to release the queen.

The Entrance-Guard Plan.

In place of clipping the queen's wings, many apiarists prefer the Entrance-guards, one of which is attached at every entrance. The queen cannot, of course, pass the perforated zinc, and there is, in consequence, no danger of her getting lost in the grass. Then if the women-folks won't go near, the bees will go back to the old hive; but you may be sure they will try it over again unless you give them a new hive full of empty combs or frames of foundation. They will then go to work, and probably give it up for the rest of the season. This plan has the advantage that everything will take care of itself till you get home, and there is no danger, either, that you will lose any swarms.

The Alley Trap.

This goes one step further, and catches the queen in a compartment by herself. The whole trap may then be detached, and the queen liberated in a new hive of combs on the old stand, carrying out the plan outlined under the "clipped-queen" plan above.

Prevention of Swarming When Rearing for Extracted Honey.

This is far easier to accomplish. Give the queen unlimited room for egg-laying, and, if necessary, put on another eight-frame body. From the lower

Bee-Keeping as a Pursuit.

We believe that, for the same amount of capital invested, and care in management, there is not another rural pursuit that will yield better average returns than bee-keeping. To be sure, there are localities and seasons, when, with the best of management, the returns are small, or wanting entirely; but of what rural industry can you not say the same? The energetic, careful bee-keeper usually receives a good return for money and labor expended.

A Beginning.

We cannot recommend to any one without experience more than a small beginning, say from one to six colonies of bees, and the hives and implements needed at first. These, with a good book of instructions, such as the A B C of Bee Culture, will enable you to get the experience necessary to successful bee-keeping. After the first or second year, with a few bees you will be better prepared to enlarge your investment if you think best. If you should invest heavily at first, and, because of inexperience or other unfavorable circumstances, should not make the success you expected on the start, the result with most people would be that they would give it up entirely; while if you proceed carefully and with perseverance, you are bound to succeed.

Beginner's Outfit.

If you should go no further, there are a good many beginners who would not know just what, among the many things shown in this catalog, they would need to order for a beginning. There are some things that you can not well get along without; in order to assist you to a judicious beginning, we put up an outfit consisting of the hives and implements necessary for a start of two or three colonies of bees. This consists of the following, and is styled our

Beginner's Outfit No. 1.

1 A B C of Bee Culture, cloth.....	\$1 25
1 No. 2 veil	50

Quality of Our Bee Supplies

We were formerly sole agents for A. I. Root's goods in the Northwest, but now have put in a plant of the very latest improved machinery, and make our own Hives, Frames, Section-holders and other supplies that are made of wood, except sections. We still continue to supply Root's sections and other supplies not above mentioned.

By this arrangement we save so much freight that we can sell our Bee Supplies for from ten to fifty per cent. below our competitors, and still get rich fast enough.

All our hives, frames, section-holders, etc., are made *exactly* like Root's from the same kind of lumber, but are superior in that they are absolutely free from knots, and none of our bottoms or tops are spliced. We guarantee the workmanship to be in *every way* equal, if not superior to any in this or any other market.

story draw out a couple of combs and put them above, filling out the space in both stories with empty combs or frames of foundation. Extract from both stories as often as need be, or put on a third story of empty comb or foundation. The main thing seems to be to give the queen and bees an abundance of room. You may ask why you could not do this for comb honey. Before the bees go into the sections they will fill the combs next to the brood with honey; and if the season should be short you would get no honey in the sections. But in extracting you can take from the bees just as much as, in your judgment, the bees can spare. This subject is treated far more fully in A B C of Bee Culture. Price, in cloth, \$1.25.

Queens.—Grade and Price of Queens.

Untested queen, Jan., Feb., Mar., \$1.50; April, May, June, \$1.00; July, Aug., Sept., Oct., 75 cts.; Nov., Dec., \$1.00.

Tested queen, Jan., Feb., Mar., \$2.00; April, May, June, \$1.50; July, Aug., Sept., Oct., \$1.25; Nov., Dec., \$1.50.

Untested Queens.

An untested queen is one raised from an imported mother, or a select tested Italian queen. She is untested because she has laid but a frame or two of eggs; and as these eggs or brood have not hatched into young bees, we do not know yet whether she will be a tested Italian or a hybrid. All we guarantee in an untested queen is, that she was raised from a pure mother, and fertilized in an apiary where Italian drones largely predominate.

Tested Queens.

These are queens that have been laying for a month or so, and their young bees have already emerged from their cells. They have been in the hive long enough so that we know their progeny are pure Italian—that is, bees having three yellow bands, and, as a natural consequence, are gentle. The queens are not bright yellow, but are usually striped with yellow and black. For real business they are just as good as the

Imported Italian Queens.

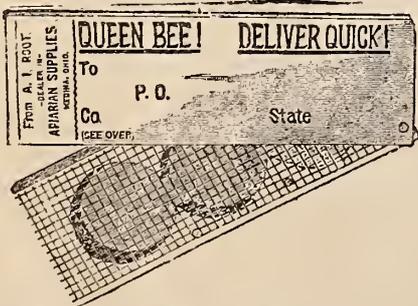
Imported queens, as the name signifies, are queens direct from Italy. While the queens themselves are a little darker than home-bred queens, they are prolific, and the bees are remarkable for gentleness. We charge more for imported queens, first, because they cost more; and second, because they are worth more. While some of them are no better than our home-bred queens, the average run of them are superior. Now, if you want a yellow queen, don't order one of these. The queens, as well as their bees, are leather-colored. Sometimes their bees, while pure, show only two bands distinctly. The third, while present, does not appear until the bees are filled with honey.

Cages for Queens.

As the Benton cage is so far superior to all others for mailing, it is the only one we offer for the purpose. To introduce, all that is necessary is to pull out the cork, and the bees "do the rest;" i. e., cut out the candy and liberate the queen by a well-known principle.

The three-hole principle makes the cage, to a certain extent, climatic. One of the end holes is filled with candy; the other end hole is well ventilated, while the center one receives ventilation only from the ventilated one. When the bees go over the mountains they will seek the center and warmer hole next to the candy. In hot climates they will naturally occupy the ventilated hole. Another feature of the cage is, that the holes are so small that the concussions through the mails do not jostle the bees about so much.

Small Benton Cage (Two-Thirds Size.)



5 cts. each; per 10, 40 cts.

Miller's Queen-Catcher and Introducing-cage

This is a very handy little thing to have in the apiary. Any one who is afraid to catch the queen by the wings can slip this cage right over her, and she will crawl up, and then the plug can be inserted. During swarming time it is very nice for catching clipped queens on the ground in the same way. It can be used advantageously, not only for introducing laying queens, but even virgin queens. Being only 1/4 inch thick it can be slipped down between the combs, or slid in at the entrance, if you have not time to open the hive. In either case the bees will eat out the candy and liberate the queens in from 24 to 36 hours. 15 cts. each, postpaid.

West's Queen-Cell Protector.

These are to prevent bees from gnawing into and tearing down cells given them at certain times of the year. When a choice cell with one of these is placed in the hive, it can readily be picked out from others that may have started up elsewhere in the hive. With them the apiary can be requeened during the swarming season at very little expense; and this, to a certain extent, will control swarming. Complete directions for use accompany each lot of cages. We also furnish spiral cages, to be slipped over these cell protectors, as shown in the cut, at the right: These are designed to hold the virgin queen, after she hatches, till she can be disposed of. Each, 10 cts.; per 10, 80 cts.

Feeding.

Bees are fed for two purposes: To stimulate brood-rearing, or to supply them with necessary stores for winter. For stimulative feeding there is nothing better than the

Simplicity Feeder.



This is to be filled with syrup made by mixing together granulated sugar and water in equal proportions by measure, and heating until thoroughly dissolved. This feeder may be placed at the entrance at night; over the brood-frames, by placing on top of the hive, or in the brood-nest itself, if a couple of frames are removed. Feeding should generally be done at night, so that the syrup can be all taken up and disposed of before morning. Each, 6 cts; per 10, 50 cts.

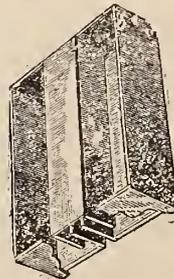
The Gray Simplicity Feeder.



This, as the engraving shows, is simply a Simplicity feeder arranged with a glass slide. It is designed to be placed tight up against the entrance; and after filling, the glass is pushed back to cover up the entire feeder. Each, 20 cts.; per 10, \$1.25.

The Miller Feeder.

This is designed to be placed inside of a super, or in the upper story on top of the brood-frames. It has two compartments for syrup. The passage-way to the bees is directly over the center of the brood-nest, at a point where there is the greatest warmth, and this makes it possible for bees to take down the syrup on cold freezing days, when the apiarist has been so negligent as to leave this operation for the last thing. Strips of wire cloth are nailed to bottom edges of the two outside boards forming bee-passages, so that it is impossible for the bees to get into the syrup and get drowned, and yet they are enabled to take out the last drop. To feed, simply raise the cover; and if the colony needs 10 lbs. of syrup fill one compartment about two-thirds full. If it needs 20 lbs., fill both compartments nearly full. The amount of stores can be quite accurately gauged on

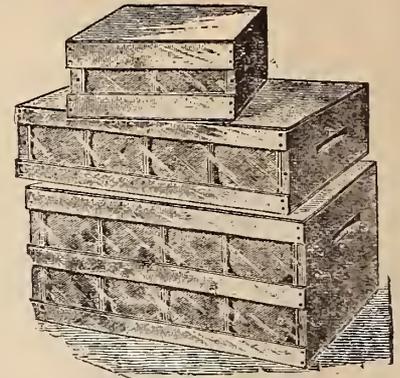


Each, 30 cts.; per 10, \$2.50.

the same plan, pro rata. This measures 11 1/2 x 13 x 4 1/4 inches outside, and will go inside of an eight-frame Dovetailed super or any of the hives we sell.

Complete directions for nailing these feeders and preparing them so they will not leak are sent with each lot in flat.

Honey Shipping-Cases.

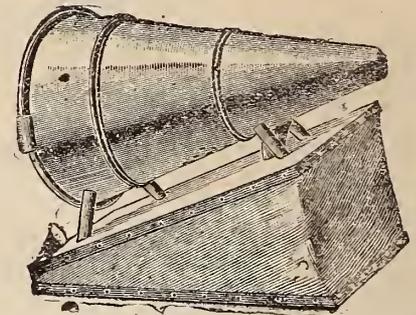


Price List of Shipping-Cases.

	each	—In flat.—		
		1	10	100
48-lb. double-tier shipping-case....	25	16	\$1 60	\$14 00
24-lb. single-tier shipping-case....	20	14	1 40	12 00
12-lb. two-row shipping-case.....	15	12	1 00	9 50

Glass extra in flat.

Clark's Cold-Blast Smoker.



The Clark cold-blast smoker has probably exceeded the sales of all the others put together, the annual number sold amounting to from fifteen to twenty thousand. Besides being cheap in price it is well made, of good size, reliable, and serviceable. It is a breech-loader, and therefore is easily replenished by simply revolving the sliding-door—no hot cone to replace and no burning of fingers. It is easily lighted with a match, and when once well going it will not go out.

Price List of Clark's Cold-Blast Smoker.

One to four smokers, 50 cts. each; by mail 70 cts. Prices of larger quantities on application.

Cogshall's Bee-Brush.



Price, 15 cts.; postage, 6 cts. extra.

This is a sort of whisk-broom especially adapted and made for brushing bees. The strands are thinned out, and longer, so as to give a soft, pliable sweep to the combs. For the wholesale brushing of bees off combs in extracting, we do not hesitate to pronounce this the best.

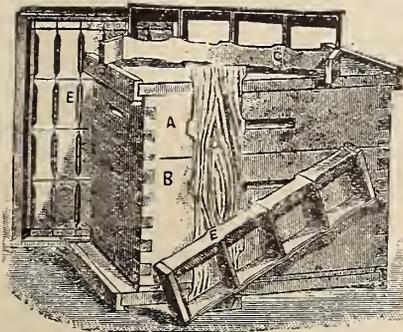
Hives.—Size of Hives.

Before describing our hives a few words regarding sizes may not be amiss. In the first place, the Langstroth frame, 9 1/8 in. deep by 17 1/2 in. long, has been, by common consent, accepted as the standard for the United States, Canada, West Indies, Mexico,

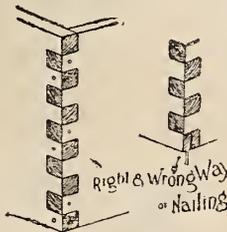
Australia, and New Zealand, insofar as there is any accepted standard at all. This size of frame, aside from the fact that it is standard, has some decided points of merit. It tiers up well; being shallow, it is easily withdrawn from the brood-nest, and hence is more easily handled than a deep frame; it brings the brood close up to the surplus, and gives a large surface for it; and, what is of considerable importance, it uses to the best advantage a standard width of barn-boards for the construction of the hive to contain them. A deep frame, on the contrary, requires wider lumber. The size of the frame, then, regulates the length and depth of the hive, but not its width. A Langstroth hive never contains less than eight frames nor more than twelve. The eight-frame size seems to be by all odds the leader, by ten to one, of all the rest put together; for, indeed, it seems to be the best adapted for the most of the localities. The eight-frame size is just large enough for the requirements of the average queen; and if she fills up the brood-nest, the surplus will be crowded just where we want it—in the supers.

While we make both the ten and twelve frame Dovetailed hives, and recognize that there is a legitimate demand for them in some localities, we strongly urge the beginner, and others who have not decided this question for themselves, to adopt the standard eight-frame size. It will probably be best adapted for your locality as it is in the great majority of them.

Dovetailed or Lock-Corner Hive.

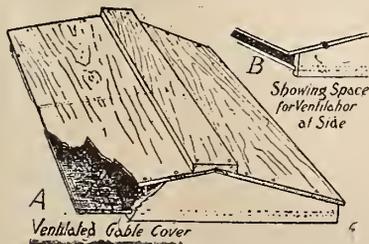


The particular feature of this hive, and hence its name, and the one which has made it rise so rapidly into popularity, is the dovetailed—or, more properly speaking, the lock corner. Unlike the old-fashioned lap, miter, or halving plan, it will not gap or pull loose, but will successfully resist all climates, and even a California sun. Our Dovetailed hives are easily put together, and when properly nailed they have five times the strength of the old-fashioned hive bodies depending merely on the strength of the nails; hence, when once put together square, they will stay so. All our dovetailing is done on special automatic machinery that works smooth, accurate, polished, square cuts.



The Root Ventilated Gable Cover.

For hot climates or elsewhere, where shades from trees or vines is not available, we have constructed a double-gable cover. It renders unnecessary the shade-board and 20-lb. stone. The under side of the



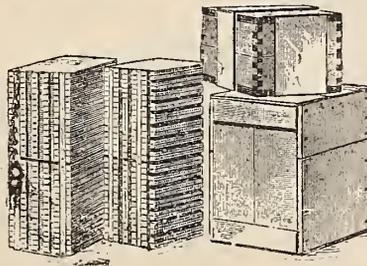
cover is flat, and made of 1/4-in. stuff let into grooves in the end cleats. The cover boards are of 3/8-in.

stuff, and at the lowest point are 1/4 in. from the lower boards, and at the highest point 2 inches. A piece is inserted half way between the two gable ends, to which both upper and lower boards are nailed. This makes the cover very strong and prevents the upper boards from warping. This long open space at the sides, together with the holes at the gables, give ample chance for the air to circulate over the inner cover but not into the hive.

Bottom-Board.

The bottom-board is made of one wide board. It is 14x21 1/4 inches, and 7/8 inch thick. A grooved cleat at the back end projects up and down from the board 3/8 inch, and one at front end is level with the board on top. A strip on each side 3/8x7/8, with the upward projection on cleat at the back forms the bee space, the absence of the upward projection on front cleat provides for the entrance and alighting board 2 1/2 inches deep and full width of the hive. By this means the hive is not cut to form an entrance, and upper and lower stories are interchangeable. This bottom may be used as a cover in an emergency, or it may be fastened permanently to the hive, if desired, by two wood screws, or long wire nails.

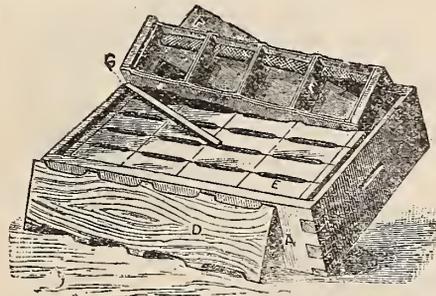
Dovetailed Hive Crated for Shipping.



The sides and ends of the hives are racked up into bundles as shown, with a stick between the tenons at each corner, and nailed, holding them compact and solid without the expense and extra weight of crating or boxing. The bottoms form the ends and sides of a box in which are packed the covers and inside fixtures. Crating is nailed crosswise on top and bottom, making a very strong package, with scarcely any added weight and expense for crating. Our present method of making the box is much stronger than formerly.

Dovetailed Super and Furniture.

The supers are the same size as the hive-body and just half the depth, 4 1/4 inches. Two supers may be used as one full body for brood or extracting frames, if necessary, in an emergency.

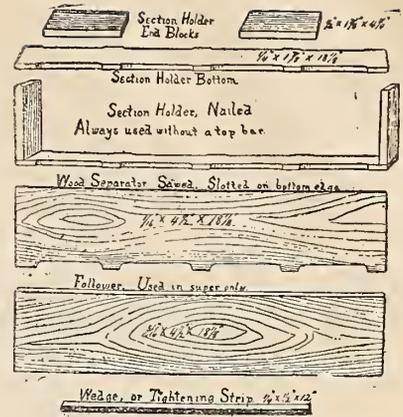


Dovetailed Super With Section Holders.

These are simply wide frames having no top-bars, with thick end-bars and bottom-bars with insets corresponding to the openings in the sections. Such a holder, unlike ordinary wide frames, can be filled and emptied easily, and, like wide frames, can be shifted from center to outside, and vice versa. The bottoms of the section-holders are made 1/4 inch thick, and there is a 1/4-inch bee-space above the sections in the super. This is the surplus arrangement that we recommend.

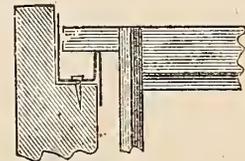
The section-holders and sections we send out with these hives are 1 1/2 wide, unless otherwise ordered.

We put in wood separators, as they are preferred to those of tin. They are warmer, and the bees can walk up and down upon them, which they can not readily do on tin. This, of course, saves much "travel stain" to the fine white cappings of the honey. These wood separators, as shown, are better than the old narrow ones, in that they are slotted out on one side and are wide enough to cover the



entire length of the upright edges of the sections, as well as the horizontal edges not scored out in the sections and bottom slats where they come in contact. When the whole is keyed up with the follower and wedge, all cracks are closed up by the wide separators, and little if any propolis is daubed on the edges of the sections.

Dimensions and Hive-Rabbit.



The hive-body consists of a plain box of 7/8-inch pine lumber, planed both sides, 13 7/8x20 in. outside measure, and 9 1/2 inches deep, with hand-holes in each side and end. The top inside edge of the ends is rabbeted 7-16 inch by 13-16 deep. In this rabbet is nailed our improved tin rabbet, as shown in the accompanying diagram, which gives a cross-section of the upper edge of the hive, with rabbet nailed in, and a frame resting on it.

The shape of the rabbet itself apart from the hive is shown clearly. A is the point on which the frames rest, and D is where the nails secure it to the hive. With the Hoffman there should be a free, lateral sliding motion when the frames are manipulated, and this the new rabbet permits.

Dovetailed T Super With T Tins.

For those who prefer the T super we will furnish the Dovetailed T super made especially for 4 1/4 sections, and to fit the regular Dovetailed hive, at the same prices as other Dovetailed comb honey hives complete, and empty, nailed, or in flat.

Descriptive List of Dovetailed Hives.

No. 1 Dovetailed hive, 8-frame, complete, a 1 1/2-story hive for comb honey, as shown, includes bottom-board and cover; a body with eight improved Hoffman thick-top frames and plain division-board; one super with a follower and wedge; 6 section-holders with slotted separators, sections, and foundation starters.

No. 1E is the same hive leaving out sections and starters; everything else mentioned is included.

No. 2 Dovetailed hive, 8-frame, complete, includes a bottom and cover, a body with 8 Hoffman thick-top frames, division-board, 2 supers with followers and wedges, 12 section-holders, with sections, separators, and foundation-starters, making a 2-story hive for comb honey, as shown.

No. 2E is No. 2, with sections and starters omitted.

No. 5 Dovetailed hive, 8-frame, complete, is a 2-story hive for extractor, and includes bottom and cover, two bodies with 16 Hoffman frames and two division-boards; foundation-starters for frames, and No. 13 zinc honey-board, as shown. No. 5E is the same as No. 5, with starters and honey-board omitted.



Dovetailed Hives at Root's Pri es.

Order by number and carry out the price.

Number and Name.	Nailed	In flat.		W'ght of 10.
	each	1	10	
No. 1 Dov. hive complete.	\$1 70	\$1 30	\$12 00	290 lbs.
No. 1E Dov. hive empty...	1 40	1 10	10 00	270 lbs.
No. 2 Dov. hive complete.	2 30	1 70	16 00	370 lbs.
No. 2E Dov. hive empty...	1 80	1 35	12 50	330 lbs.
No. 5 Dov. hive complete.	2 00	1 50	14 00	330 lbs.
No. 5E Dov. hive empty...	1 65	1 25	11 50	320 lbs.

Write for prices on larger quantities.

Five hives furnished at the same rate as ten.

Any of above hives furnished with frames pierced, and wire included without extra charge if so ordered. If wanted, add P. W. to the number in ordering.

Honey-boards may be added at price in table of honey-boards.

Hives furnished with gable covers, instead of flat cover, same price if so ordered. If wanted, add G. to the number in ordering.

Western Hives.

We have them. They are made from best Oregon pine, and are the best cheap hives on the market. Note the prices:

	Each	Each in	10
	Nailed.	flats.	
No. 1, 8-frame.....	\$1 40	\$1 20	\$11 00
No. 1E, 8-frame.....	1 10	1 95	8 75
No. 2, 8-frame.....	1 75	1 50	14 00
No. 2E, 8-frame.....	1 40	1 20	11 00

Ten-Frame Dovetailed Hives.

We will make the Dovetailed hive 10-frame instead of 8-frame, in any of the above numbers, as follows: In flat, 25c extra.

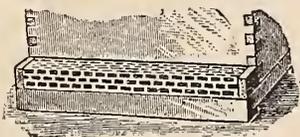
Perforated Zinc.

This is used between the upper and lower stories, to prevent the queen from going above. It is also used in entrance-guards, for queen and drone traps, etc. The size of the perforations in our make of zinc is 17-100. This is found to effectually stop all queens and drones from passing through, but allows the workers to pass easily without hindrance.

Price List of Perforated Zinc.

Zinc strips, 1 row holes, 3/4x18 to 1 1/4 in., per 100...\$1 00
Perforated zinc sheets, 28x96 inches, each 1 40
Less than a sheet of zinc, 10c per foot. By mail 10c per foot extra. Zinc strips may be sent by mail for 1c each for postage.

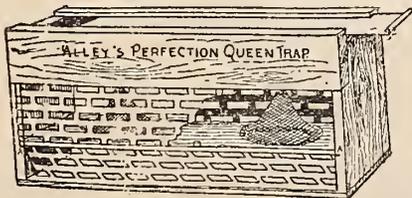
Bee-Entrance Guards.



Price, by mail, 10 cents each; 10 for 60 cents.

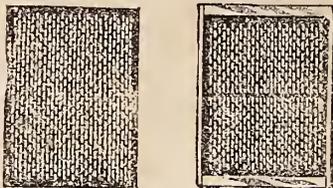
These are placed in front of the entrances for various purposes. They may be used in swarming time to prevent the queen from going out, or on the hives whose drones are not such as you want to breed from at a time when you are rearing queens.

Alley's Queen and Drone Trap.



It is designed to automatically catch and cage the drones in an apartment by themselves. They can then be carried to another apiary, or be destroyed, as circumstances require. The trap will also catch the queen when a swarm issues, and hold her confined until the apiarist can give her his attention. As she cannot get away, the bees will in all likelihood return into the hive. Or, if you happen to be on hand when the swarm comes out, the trap with the queen can be placed among the flying bees. The latter will probably cluster about the queen, and they may then be hived. Price, 55 each; \$4.50 per 10.

Honey-Boards.



Their chief use is for confining the queen in the brood-chamber, and we have had many testimonies from large bee-keepers of their value for this purpose, particularly for extracting

Price List of Honey-Boards.

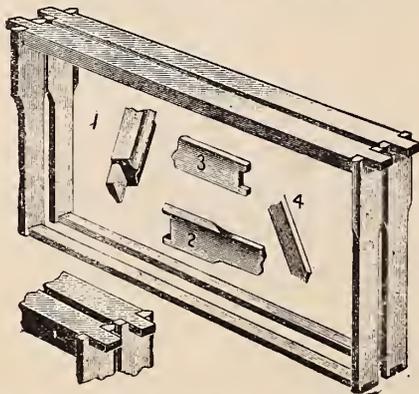
Order by number and name, and carry out the price.

No. 11, 8-frame Unbound zinc, 12x19 1/2, 20 cts. each; price of 10, \$1.50; weight of 10, 8 lbs.

No. 2, Simp. Wood-bound zinc, 14 1/2x19 1/2, 25 cts. each; price of 10, \$2.00; weight of 10, 10 lbs.

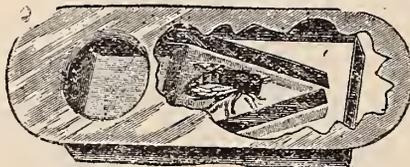
Price, 10 for 25c; per 100, \$2 00.

Self-Spacing Hoffman Frames.



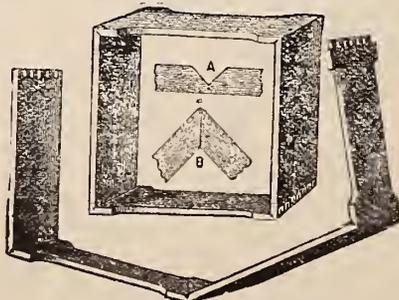
Fixed, or self-spacing frames, in some form or other, are rapidly growing into favor among progressive bee-keepers. After much study and experimentation on a large scale, we have adopted for all our hives the Hoffman frame. They are always ready for hauling over good or poor roads, without any special preparation in fastening the frames. Beginners don't make the blundering work in spacing them in the hive, the combs are straighter, and with those who are expert in their use, they can be handled in less time.

Porter Bee-Escape.



Price, escapes only 20 c each; \$2 25 per doz., post-paid. We furnish these to dealers at manufacturers' prices.

Board complete for Dovetailed hive, 35c each. It is almost superfluous to say anything in favor of this most excellent device. No well-regulated apiary can be complete without at least a few bee escapes, and the Porter seems to be the best.



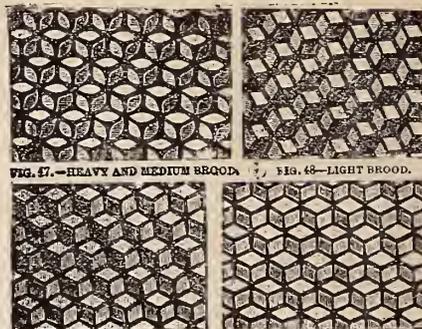
One-Piece V-Groove Sections.

Price List of 4 1-4 Inch Sections.

White, any width, price of 1000, \$3.90; 3000, \$11.25
Cream, 1 1/4 and 1 1/2-16, price of 1000, \$3.75; 3000, \$9.85
White, 50 cts. per 100; or 500 for \$2.15.
Cream, 45 cts. per 100; or 500 for \$2.00.
Write for special prices on large quantities.

Comb Foundation.

All our comb foundation is made from pure bright yellow beeswax. The lightest-colored is selected for thin foundation for sections, and the rest is made into comb foundation for the brood-chamber.



Heavy Brood, from 4 to 5 square feet per lb.
Medium Brood, from 5 to 6 square feet per lb.
Light brood, from 7 to 8 square feet per lb.
Thin Surplus, about 10 square feet per lb.
Extra Thin Surplus, from 11 to 12 square ft. per lb.

Table of Prices of Comb Foundation.

When you order, be sure to tell which weight you want, and give price.

Small samples of each kind will be mailed free. We guarantee foundation furnished fully equal to samples in every respect. Send for samples and compare with other makes, and see if ours is not fully equal, if not superior, to any other on the market.

Price per lb. in lots not less than

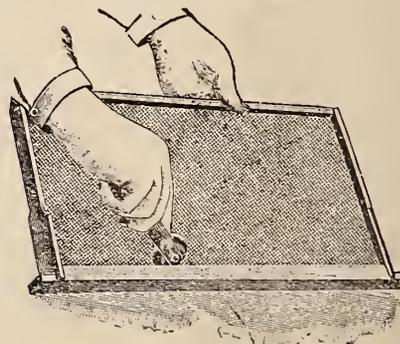
Name of Grade.	Sq. ft. per lb.	1 lb	10	25
Heavy brood foundation...	4 to 5	47	46	45
Medium brood foundation...	5 to 6	47	46	45
Light brood foundation...	7 to 8	50	49	48
Thin surplus foundation...	10	57	56	55
Ex.thin surplus foundation	11 to 12	62	61	60

For 100 pounds or over, write for wholesale price.

Foundation packed for mailing requires 25 cets per pound postage. Not less than 1 pound of brood foundation, L size, can be packed safely for mailing or less than 3 pounds of larger sizes. Brood foundation is made in one regular size, 7 1/4x16 1/2.

Thin and extra thin surplus is in sheets one regular width, 3 3/4 inches, and 1 1/2, 16 1/2, or 19 1/2 inches long.

Bees Foundation-Roller.



Price 15 cents; by mail, 18 cents.

All that is necessary is, to lay the sheet on the wires, dip the roller into water to prevent the wax from sticking, and pass it along the edge of the foundation. The first time over the pressure should be light and increased until the edge is firmly pressed into the wood.

Honey-Knives.



The "Novice" Honey-Knife.

This is by no means equal to the Bingham or Abbott for uncapping alone, but useful for other purposes, such as scraping propolis off bottom boards, covers, etc., for transferring and cutting chunk honey generally. It has a thin blade, with a keen edge, beautifully finished. The Quinby is the same knife, with the point curved. Each, 85c; postage 5c.



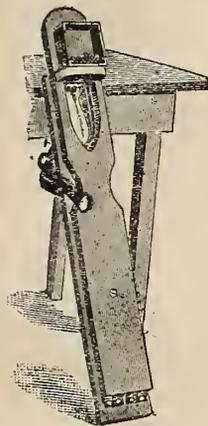
Abbott Uncapping-Knife.

This style of knife is altogether the best for uncapping. It is now made of the best American steel, and an exact copy of Bingham's, except the holes. We send this knife when order does not specify which kind is wanted, because we consider it the best. Each 85c; postage, 5c.

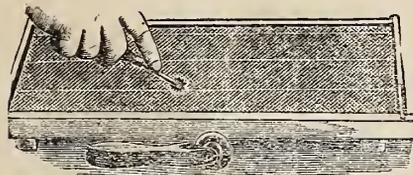
Daisy Foundation Fastener.

Price, with lamp.....\$1 00
Price, without lamp..... 75
Weight without lamp 5 lbs.

This is the best for putting starters into sections. Nothing could be more simple, or more easily operated than this machine; and we are sure it will put starters in better and faster than any machine before produced. With this a boy or girl will put starters in about 500 sections per hour, and do it nicer than any of the presser machines we formerly sold. Complete directions accompany each machine.



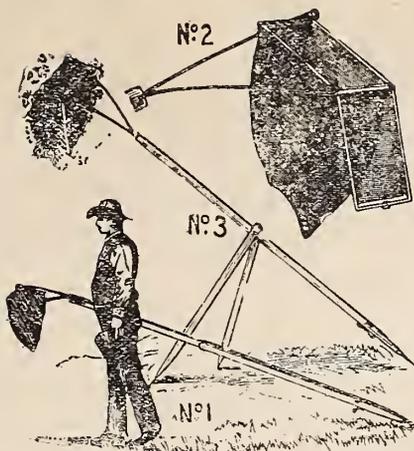
Spur Wire-Imbedder.



Price 15 cents; by mail, 18 cents.

This is a little tool like a tracing-wheel, with the teeth set in such a way as to straddle the wire while it is in the act of imbedding. It is the best tool we have ever tried for the purpose.

Manum's Swarm-Catcher.



Price, with pole, \$1 25; without pole, \$1 00.

We have tested and examined many swarm-catchers, but have never found anything that would begin to compare with the Manum. It is simply a wire-cloth basket with a lid to close it. To hive a swarm whose queen is at large with the bees, open the basket, as shown; push it up around the cluster of bees, jar the latter off the limb, and close the lid by raking it against a lower limb, so as to throw it over on top. Half or two-thirds of the bees will be in the basket. Adjust the legs of tripod so that the basket will be suspended in the air, where the bees are flying the thickest. They, attracted by the bees inside, will cluster on the outside of the basket. While the bees are clustering, prepare the hive, if you have not already done so. This done, go back to the catcher, which you will find has caught all the bees. Very gently lift up the two front legs of the tripod, fold them against the main bar, and then carry the whole to the empty hive; invert the basket and dump. Close the hive, and the hiving is done. This device will reach a swarm 20 feet from the ground; it is light and easily handled. After the bees are once in the basket they cannot escape, and the prisoners will draw the others. The great feature of the device is that it will stand alone, and hold the basket where the bees are flying the thickest, without any one holding it, while the apiarist in the meantime is preparing a hive elsewhere.

Rubber Gloves.

We sell large quantities of these, and recommend them for handling bees. We can furnish a good article, well worth the money, as follows:

Price List of Rubber Gloves.

Ladies' sizes, Nos. 6, 7, 8, and 9...\$1 35; postage, 5c
Gents' sizes, Nos. 10, 11 and 12..... 1 45; postage 5c
Extra long driving, Nos. 13 and 14.. 1 70; postage 10c
Mark size of hand on sheet of paper when ordering.

If you order by number, remember that in rubber you need two sizes larger than you wear in kid; i. e., if you wear No. 6 in kid, you will need No. 8 rubber.

Honey Extractors.



The above cut will show, better than anything we can say, the relative sizes of the three machines we build for Langstroth frames. They weigh respectively 25, 45, and 117 lbs., uncrated; and the diameter of the cans are, respectively, 17, 20 and 28 inches.

Price List of Extractors.

No. 15, Cowan Reversible, 2 frame\$12
No. 18, Cowan Reversible, 2 frame 15
No. 25, Cowan Reversible, 4 frame 23

Bee Veils.

Our veils each contain 1½ yards of the best material for the purpose. They are well made, with rubber cord in the top to fit around the hat, and the lower edge is bound with blue ribbon to prevent fraying. No 2, cotton, with silk face, 50 cents.



Price List of T Tins.

	Price	Wght
The end of a T tin is shown under the T super at the left.	100	100
T tins, 12, 13½, 14 in long or under....	\$1 25	7 lbs.
T tins, 16 in. and under, to 14 in. long..	1 50	8 lbs.
T tins, over 16 in. up to 20 in.....	2 00	10 lbs.
Flat tins, 14 in. and under, ¾ wide....	50	3 lbs.
Flat tins, 14 to 20 in. long, ¾ wide.....	70	5 lbs.

75 cts.

Your Reward

For Looking Through This Catalogue

Carefully enough to find this offer, will be as follows:

If you will send us an order for at least two dollars worth of Vegetable Seeds selected from this catalogue, and include 25 cents for the Web-foot Planter one year we will send you

Free of Charge

one of our Apex Gooseberry plants which heretofore has not sold for less

than 75 cents each. The Apex Berry is the largest and best in the market the fruit selling last year at 20 cents per pound on account of its being so large and highly flavored. Remember we send it

Absolutely FREE of Charge

as a reward for your careful perusal of this catalogue, to all those purchasing \$2.00 worth of Vegetable Seeds at catalogue prices, and sending us 25 cents additional to pay for

The Webfoot Planter
—For One Year—

If you find this offer and want the plant, you must mention it in your order.



WEBFOOT FERTILIZERS

Don't Forget
the name
"Webfoot"

Since we first started in manufacturing "Webfoot" Fertilizers five years ago, ever so many competitors have been trying to put up a brand that will give equal results, but so far "Webfoot" leads them all, as is evidenced by the very highest authority. See the bulletin published by the Oregon Agricultural College. This official test shows "Webfoot" Fertilizers from 20 to 50 per cent richer, and consequent better results in field tests are shown.

GET THE BEST!

WEBFOOT FERTILIZERS

Special Fertilizer Catalogue No. 9, tells all about how to use them and get from 30 to 75 per cent increase of crops, besides advancing the maturity of vegetables from one to three weeks. The catalogue is **Free.** Send for it.

Names and Descriptions of the Different Grades we Manufacture.



Webfoot Complete Fertilizer for Light Soils.

A bone super-phosphate made specially for such crops as vegetables of all kinds, wheat, oats, and all grain and grass crops; in fact, it is what its name indicates, a *complete* fertilizer for light soils. 300 to 1000 pounds per acre.
\$1.90 per 100 lbs., or \$1.70 per 100 lbs. in ten bag lots.

Webfoot Complete Fertilizer for Heavy Soils.

A bone super-phosphate made specially for same crops as above, but with more potash and less nitrogen, for heavy soils instead of light. 300 to 1000 lbs. per acre.
\$1.90 per 100 lbs., or \$1.70 per 100 lbs. in ten bag lots.

Webfoot Potato Grower.

A bone super-phosphate made specially for potatoes on any soil, and containing more potash than any other potato grower on the market. Of course it will give good results on other root crops, but it is for potatoes specially. Use 500 to 1000 pounds per acre.
\$2.20 per 100 lbs., or \$1.90 in ten bag lots.

Webfoot Hop Grower.

A bone fertilizer made specially for hops, with small per cent. of nitrogen and phosphoric acid, but rich in potash in the form of sulphates, and will give larger returns than any other fertilizer you can get. 500 to 1000 pounds per acre.
\$2.20 per 100 lbs., or \$1.90 in ten bag lots.

Webfoot Fruit Tree and Vine Phosphate.

This is a bone fertilizer made specially for Trees, Vines, Roses, Plants, etc., and is just what is needed to make a steady, thrifty, continued growth. It lasts for several years, and is far better for the plant or tree than manure, and gives greater returns. 200 to 600 lbs. per acre.
\$1.90 per 100 lbs., or \$1.70 in ten bag lots.

Strawberry Grower.

This is a bone super-phosphate made specially for Strawberries and all small fruits. It will, under reasonable circumstances, increase crop 50 to 75 per cent., and *advance the maturity from one to two weeks.*
\$2.00 per 100 lbs., or \$1.90 per 100 lbs. in ten bag lots.

Webfoot Lawn Grower.

ODORLESS.

A fertilizer which we have found to be never failing in inducing a rapid and rich green growth to the lawn. It meets the wants of hundreds of patrons who desire a clean, portable and convenient lawn dressing. 50 to 100 pounds is sufficient to go over a city lot, or double for forming a new lawn.
\$2.20 per 100 lbs., or 2½ cts. per lb. in smaller quantities.

Potash Salts.

An illustrated pamphlet on the use of potash in agriculture will be mailed free on application. Our stock of Potash Salts comes direct from the German Kali Works, Stassfurt, Germany, by sailing vessel, and hence we quote it at San Francisco or New York prices:

	Per lb.	Per Sack 24 lbs. net.
MURIATE, not good on fruit crops.....	3½ cents.	\$6.75
SULPHATE, the cheapest and best form....	3¾ "	7.35
KALINITE	1½ "	2.80
NITRATE OF SODA	3 "	

Bone Meal.

Bone Meal cannot be surpassed as a slow-acting fertilizer; also excellent for small chickens.
\$1.40 per 100 lbs., or \$1.20 in ten bag lots.

Granulated Bone.

Granulated Bone is ground a little coarser than Bone Meal, for feeding to poultry.
\$1.40 per 100 lbs., or \$1.20 in ten bag lots.

Ground Dried Blood.

Ground dried Blood is the cheapest and best form of furnishing nitrogen, ammonia to the soil.
\$2.10 per 100 lbs., or \$1.90 in ten bag lots.

Price List

APPLE AND NUT TREES SMALL FRUITS, ETC.



When not otherwise stated, prices in this Price List include careful packing and delivery to transportation companies at Nursery (safe arrival guaranteed), but the purchaser must pay the transportation charges.



REMEMBER WE CHEERFULLY GUARANTEE THAT YOU CAN
PROCURE BETTER TREES OR PLANTS ANYWHERE
AT ANY PRICE. OUR STOCK HAVING TAKEN FIRST PRIZE OVER ALL COMPETITION
FOUR YEARS IN SUCCESSION NOW.

APPLES

Early Harvest, Red Astrachan, Red June, Red Beitigheimer, Tetofsky, Yellow Transparent, Alexander, Duchess of Oldenburg, Fall Pippin, Fameuse, Gravenstein, King, Seek No Farther, Waxen, Ben Davis, Baldwin, Cooper's Market, Esopus Spitzenburg, English Russett, Indiana Favorite, Jonathan, Mann, Monmouth Pippin, Northern Spy, Rome Beauty, Rox Russet, Rhode Island Greening, Swaar, Wolf River, Wine Sap, Wealthy, W. W. Pearmain, Walbridge, Y. N. Pippin, Yellow Bellflower.	10	100	1000
2 and 3 years, 5 to 7 feet	\$1 25	\$10 00	\$70 00
2 years, 4 to 5 feet	1 00	7 00	50 00
1 year, 3 to 4 feet	80	6 00	40 00

CRAB APPLES

Gen. Grant, Siberian, Hyslop, Transcendent, Martha, Whitney.	10	100
2 years, 4 to 5 feet	\$1 00	\$7 50
1 year, 3 to 4 feet	80	6 00

PEARS

Bartlett, Beurre Gifford, Clapp's Favorite, Comet or Lawson, Early Butter, Le Conte, Madeline, Osband Summer, Sonve du Congress, Beurre de Anjou, Beurre Clairgeau, Duchess de Anjouleme, Fall Butter, Flemish Beauty, Kieffer's Hybrid, Louisa B. de Jersey, Seckle, Dnchess de Bordeaux, Easter Beurre, Pound, P. Barry, Vicar, Winter Nellis, Passa Colmur.	10	100	1000
2 and 3 years, 5 to 7 feet	\$1 25	\$10 00	\$65 00
1 and 2 years, 4 to 5 feet	1 00	8 00	50 00
1 year, 3 to 4 feet	80	6 00	40 00

CHERRIES

Royal Ann, Rockport, Black Bigarreau, Black Tartarian, Centennial, Coe's Transparent, Early Purple Guigne, Elton, Gov. Wood, Oregon, Black Republican, Lincoln, Maj. Francis, Willamette, Yellow Spanish, Kentish, Late	10	100	1000
2 and 3 years, 5 to 7 feet	\$1 25	\$10 00	\$65 00
1 and 2 years, 4 to 5 feet	1 00	8 00	50 00
1 year, 3 to 4 feet	80	6 00	40 00

Duke, May Duke, Olivet, Luelling.

	10	100	1000
2 and 3 years, 5 to 7 feet	\$1 40	\$10 00	\$65 00
1 and 2 years, 4 to 5 feet	1 10	8 00	50 00
1 year, 3 to 4 feet	80	6 00	40 00
Bing, 2 years, 4 to 5 feet	2 25		
" 1 year, 3 to 4 feet	1 75		
Lambert, 75 cts. each.			

PRUNE

On Peach or Myrabolan			
Italian, Golden, Silver, German, Hungarian, Petite, Champion.	10	100	1000
2 years, 5 to 7 feet	\$1 00	\$6 00	\$40 00
1 and 2 years, 4 to 5 feet	90	5 00	35 00
1 year, 3 to 4 feet	60	4 00	20 00
Pacific (new)—50 cts. each.			

PLUM

Bradshaw, Columbia, Coe's Golden Drop, Damsford, Peach Plum, Washington, Kelsey, Ogden, Prunus Simoni, Early Golden Drop, Reine Claude, Yellow Egg.	10	100	1000
2 to 3 years, 5 to 7 feet	\$1 25	\$9 00	\$60 00
1 year, 4 to 5 feet	1 00	7 50	45 00

PEACHES

Alexander, Amsden, Early Crawford, Late Crawford, Early River, Lemon Cling, Salwav, Wheatland, Wonderful, Early Charlotte, Foster, Globe, Hale's Early, Muir, Wager, Golden Cling, Moody Cling.	10	100	1000
One year, 4 to 6 feet	\$1 25	\$7 50	
One year, 3 to 4 feet	90	6 00	

APRICOTS

Moorpark, Royal, Hemshirk, Russian.	10	100	1000
Two years, 4 to 6 feet	\$1 75	\$10 00	
One year, 3 to 4 feet	1 00	6 00	

NECTARINE

Boston, New White, Victoria.	10	100	1000
One year, 4 to 6 feet	\$1 75	\$12 50	
One year, 3 to 4 feet	1 50	10 00	

QUINCE

Orange, Angers, Meechs.	10	100	1000
Two years, 4 to 6 feet	\$2 00	\$12 50	
One year, 3 to 4 feet	1 60	10 00	

GRAPES

Black July, Brighton, Black Hamburg, Concord, Delaware, Empire State, Isabella, Muscat of Alexander, Niagara, Royal Muscadine, Seedless Sultan.	10	100	1000
Two years	\$1 40	\$8 00	
One year	1 10	7 00	

CURRANTS

Cherry, White Grape, Fay's Prolific, White Dutch, Black Naple.	10	100	1000
One & 2 yrs, leading kinds	\$50	\$3 00	\$16 00
One & 2 yrs, Fay's Prolific	1 00	5 00	22 00

GOOSEBERRIES

Two years, Houghton	\$50	\$3 50	\$15 00
Two years, Champion	50	2 50	12 00
Two years, Apex—largest of all—each 25 cents.			

BLACKBERRIES

Kittatinny and Lawton	\$50	\$3 50	\$15 00
Early Harvest & Evgrn	75	4 00	

RASPBERRIES

Gregg, Mann, Cluster, Cuthbert, Souhegan, Golden Queen	10	100	1000
Queen	\$50	\$3 50	\$15 00

STRAWBERRIES

	Per doz.	100	1000
Sharpless, Wilson's	\$20	\$75	\$2 50
Albany, Triumph de Gande			
Oregon Everbearing, Early Mitchell, Clark's Seedling	50	1 25	5 00

BIG CUT IN GARDEN TOOLS

These are the most popular and complete garden tools made. They are known the world over, and beyond question a design, construction and finish, and most practical yet invented. No wide-awake farmer or gardener can afford to be without them. We are unable to permit illustrating and describing all of the "Planet Jr." tools, but we will gladly send a fully illustrated catalogue to a

The New "Planet Jr." No. 3 Hill Dropping Seed Drill.

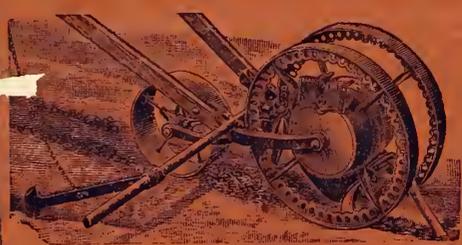


Jr." No. 3 Hill Dropping Seed Drill. The New "Planet

Until recently there was no such thing as a Hill Dropping Seeder, the most modern Drills sowing continuously only, but the demand for a machine that could be adjusted to sow in hills was very great. This drill will sow in a continuous row, in the ordinary way, with the greatest regularity, but its distinctive feature is that it will drop neatly in hills, either four, six, eight, twelve or twenty-four inches apart. It opens the furrow, drops in hills or drills, covers, rolls down and marks the next row, all at one operation. The hopper holds three quarts. The wheel is 13 ins. high. It is changed in a moment from hill dropping to drill work. It has a force feed, sows equally well whether the hopper is full or contains only a paper of seed, and will not injure delicate seed, such as radish, cabbage, etc. Price, \$9.75.

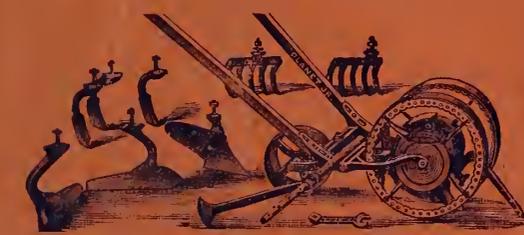
"Planet Jr." No. 2 Seed Drill.

This drill is used the world over with the exception of the Hill Dropping Drill, which is known as one-half the size of the "Planet Jr." No. 2. It is a simple machine, whether used for little in the evening plow, between the rows, or for all irregular work, is adjustable, opens the furrow to any depth, and the machine is very simple, having no gears, belts or gearing, the seed cannot be injured, even if sprouted. The plow is adjustable and opens a very narrow furrow, which is a great advantage for after cultivation. Price \$7.25.



No. 2 Seed Drill.

The "Planet Jr." Combined Drill and Wheel Hoe, Cultivator, Rake and Plow.



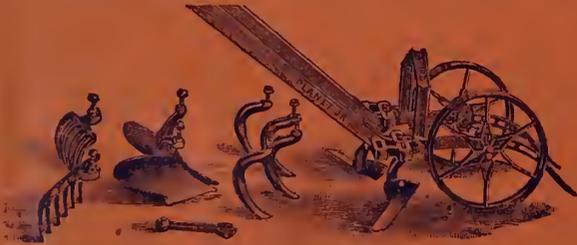
"Planet Jr." Combined Drill.

Used as a Drill the seed is sown with great regularity and at uniform depth, regulated at pleasure. The hopper holds one quart. From a drill it is changed to its other uses by unscrewing but two bolts, when any of the attachments shown in the cut can be instantly attached. Price \$9.75.

This is the most popular combined tool known, and its friends have been gained by substantial merit alone. As a seed sower it is identical with the No. 2 "Planet Jr." Drill, except in size, and has all its merits, its strength, durability, ease of operation and perfection of work. This combined tool has a complete set of cultivating tools, and all its operations are rapid, easy, perfect and delightful. When

The Planet Jr. Double Wheel Hoe, Cultivator, Rake and Plow.

Thousands of farmers, and gardeners who own this tool save its cost once or more times every year, for in an onion field and among many other crops, one can do more and better work with it than six men with ordinary hoes. It is invaluable for all market garden crops. The wheels are only ten inches high, as a high wheel is wrong for a Wheel Hoe, since the wheels are simply depth regulators, not load carriers. The "Planet Jr." Double Wheel Hoe will straddle plants eighteen inches high, and finish rows from six to eighteen



The Planet Jr. Double Wheel Hoe.

inches apart at one passage. All the tools shown in the cut go with the hoe, and all the blades are steel, hardened in oil and polished. The machine is able to make the work shallow or deep, as required, and to adapt the width rows. Price \$6.75.

The "Planet Jr." Plain Double Wheel Hoe.

To accommodate those who have little work but hoeing, we offer the machine described with hoes only. The other parts can be added at any time, and will be found to fit. It is just the thing for onion growers and others who want a hoe only, and at small cost. Price \$4.25.



"Planet Jr." No. 8 Horse Hoe.

The "Planet Jr." Single Wheel Hoe, Cultivator, Rake and Plow.

This Wheel Hoe is considerably lighter than the Double, but does almost the same variety of work, being used mostly between the rows, yet it can be used to hoe both sides at once, while plants are small, by placing the wheel at one side of the frame. The form of the hoes insures a forward slanting cut next to the plant, and consequent close work without danger, and thorough cultivation of the soil. The rakes and cultivator teeth, and the hoes and plow enable the operator to perform almost every variety of work, either in the field or garden. All rows from 6 to 18 inches apart can be hoed at one passage. The frame is quickly raised or lowered to regulate depth; and the wheel has an extra broad face. Price \$5.25.



The "Planter Jr." Single Wheel Hoe.

The "Fire Fly" Single Wheel Hoe, Cultivator and Plow.

This popular tool is exactly the same as the "Planet Jr." Single Wheel Hoe, excepting that it does not have the rake or leaf lifter. Price \$4.25.

MISCELLANEOUS.

Pruning Snears.
Best all steel, \$1.25, good all steel \$1, common 45c to 75c.



Diston's Pruning Saws, 80c each.



Mole Traps, 85c.



Weeders, 20c.



Sulphur Bellows, \$1.50.



Tree Pruners.
8 feet 75c, 10 feet 85c.